

## Enjambment

### *Intonation and Ambiguity*

Syntactic units frequently end at the end of verse lines. Enjambment is a conflict between the two kinds of unit: the syntactic unit “overflows” from one line to the other. This chapter does not offer an exhaustive theory of enjambment.<sup>1</sup> It will explore a few issues that are crucial for Cognitive Poetics or for the present empirical inquiry. It will investigate at length the nature of intonation patterns in poetry reading. Apart from some possible emotive functions, intonation in prose language has three linguistic functions: (1) indicating the distinction between, for example, indicative, interrogative, and imperative sentences; (2) articulation of the speech stream into smaller perceptual units; (3) syntactic disambiguation. In poetic language, in addition, the function of intonation is to articulate the prosodic units as perceptual wholes. Consequently, it is a misconception—held, following Dr. Johnson, by some contemporary critics—that blank verse and *vers libre* are “often only verse for the eye”. Just as the graphic arrangement on the page presents the lines as perceptual units to the eye, the intonation contours heard in the reading of poetry present the lines as perceptual units to the ear. In fact, the main function of the graphic arrangement on the page is to give the reader instructions concerning the intonation contours appropriate to the lines; whereas the intonation contours appropriate to the syntactic units are determined by our linguistic competence. When the versification unit and the linguistic unit conflict, the intonation contours that articulate them conflict too. Such contours are the result of the interaction of the intonation contours required by prose rhythm with those that articulate the line. It is assumed that the listener decodes these contours in terms of the intonation contours from whose interplay they arise. Frequently, as we have seen throughout the present study, this interplay is manifest not so much in the actual shapes of the intonation curves but on a more abstract level, in the contrary indications of continuation and discontinuation. A conspicuous instance of how the conflicting contours of stress and intonation exert “pressure” upon each other and generate some new, uncommon contour can be seen in the readings of Donne’s line discussed in Chapter 6:

7

1. Buffet and scoffe, scorge, and crucifie mee!  
(Donne, Holy Sonnet XI: 2)

<sup>1</sup> Golomb (1979) offers what I consider the definitive study of enjambment.

Click here to go to the sound files for this chapter:  
[http://www.tau.ac.il/~tsurxx/Rhythm\\_Book\\_mp/Chapter7b\\_Sound\\_Files.html](http://www.tau.ac.il/~tsurxx/Rhythm_Book_mp/Chapter7b_Sound_Files.html)

Here “mee” is an unstressed pronoun, whereas the metric pattern requires a stressed syllable; what is more, the stress valley foregrounded by performance, to solve the problem arising from a stress maximum in the seventh position, requires a more than usually strong stress on “mee”. As we saw there, performers tended to choose an intonation curve that was intermediary between the ones predicted for stressed and for unstressed syllables. This device was reinforced by some additional, uncommon articulatory devices. A conspicuous instance of uncommon, ambiguous stress contours that arise from conflicting patterns of stress and metre can be seen in cases where the leftmost stress of a compound occurs in a weak position, discussed in Chapter 5. It is also indicated there, how the listener may decode these distorted stress contours in terms of the conflicting patterns.

As I said, enjambment is a conflict between two kinds of unit: the syntactic unit “overflows” from one line to the other. In such instances, the reciter is expected to indicate two conflicting intonation contours at one and the same time. This may be achieved, according to the present conception, by conflicting cues or by ambiguous intonation contours that are decoded by the listener in terms of conflicting contours.

The view outlined above appears to be a minority view. In Chapter 3 I quoted what appears to be the “canonic” view from the “Performance” entry of *The New Princeton Encyclopedia of Poetry and Poetics* (1993) which, in turn, quotes Seymour Chatman on ambiguity. “Chatman isolates a central difference between the reading and scansion of poems on the one hand and their performance on the other: in the former two activities, ambiguities of interpretation can be preserved and do not have to be settled one way or the other (‘disambiguated’). But in performance, all ambiguities have to be resolved before or during delivery. Since the nature of performance is linear and temporal, sentences can only be read aloud once and must be given a specific intonational pattern. Hence in performance, the performer is forced to choose between alternative intonational patterns and their associated meanings”.

I have learnt an enormous lot from Chatman’s *Theory of Metre* (1965). But whenever we come up against issues related to ambiguity, I find myself in disagreement with him. Regarding both metric and intonational patterns, he construes “ambiguous” as “capable of alternative actualizations” (cf. Chapter 3, excerpt 4); and he insists that “all ambiguities have to be resolved before or during delivery”. My position, in contrast, is that “ambiguous” reflects conflicting stress or intonation patterns to be perceived simultaneously. According to Else Frenkel-Brunswick (1968), some people are intolerant of such perceptual ambiguities. The conflicting patterns may blur or enhance each other in perception, according to whether they occur in a divergent or a convergent context.

Suprasegmental phonemes (stress and intonation contours) may cue not only conflicting linguistic and versification units, but also two rival syntactic structures. As pointed out by Lieberman (1967) and others, they may be used to disambiguate utterances such as (*They decorated the girl*) (*with the flowers*) and (*They decorated the girl with the flowers*); or (*light*) (*house keeper*) and (*light house*) (*keeper*). Lieberman brings good experimental evidence to the effect that suprasegmental

phonemes have no meanings of their own. At most, they may indicate which of two possible phrase markers is meant, *if* the listener is aware of two alternative phrase markers. Modern linguistics, in its preoccupation with unambiguous communication, has devoted much attention to disambiguating devices. Now, as many contemporary critics believe, one of the main characteristics of poetic language is ambiguity. Most contours of stress and intonation employed in verbal communication (and described by linguists) are usually disambiguating contours. Katherine T. Loesch (1965) argued that in order to preserve the ambiguous character of poetic language, the performer may resort to “non-disambiguating” patterns. These patterns will not indicate two alternative meanings at one and the same time; they may, however, prevent the utterance from settling on one of two possible alternative phrase markers. They may contain information indicating both underlying phrase markers and thus become somewhat unnatural. Or, merely by their unnaturalness, they instruct the listener to look for an underlying meaning more complex than one unambiguous phrase marker.

Chatman is firm in his objection to the conceiving of ambiguities as of simultaneous patterns. In a paper called “On the ‘Intonational Fallacy’” (1966: 285), he attacks Loesch’s proposal with the question: “Has Mrs. Loesch ever heard these intonations or anything really resembling them in the flow of ordinary conversation?” This is precisely my point, which—for some reason—Loesch does not raise in her rejoinder (1966). In ordinary conversation we do not wish, as a rule, to become ambiguous on purpose. When we do, it ceases to be “the flow of ordinary conversation”. One tends, rather, to have recourse to stress and intonation contours that are disambiguating in the wrong direction, like the panda who orders a steak sandwich; after eating it he shoots the bar-tender and walks out without paying. The manager stops him at the entrance: “What do you think you are doing?” The panda answers: “As you may have noticed, I am a panda; look me up in the dictionary; it says “bearlike animal; eats, shoots, and leaves”. It is up to the listener to infer the rival, correct stress and intonation contours. This is because the panda thought that the sentence had only one meaning—the mistaken one. But in some other jokes this will not work. As I commented in Chapter 5 on the joke concerning “teaching machines” (“What are you doing for a living?” “Teaching machines”. “Oh! And do they learn well?”), such misunderstandings cannot arise “in the flow of ordinary conversation”: the “compound stress rule” unambiguously settles the meaning as “machines that are used for teaching”. If one wishes to *tell* (rather than write down) the joke, he must resort to one of those artificial, “non-disambiguating” stress contours.

The point is that poetry is organized violence against language; and prosody may give some insight into how this violence is organized.<sup>2</sup> If the meaning of poetic

<sup>2</sup> Such generative linguists as Bruce Hayes too seem to believe that all legitimate metric complexities can be settled by intonation patterns used in ordinary speech. They seem to believe, in fact, that everything possible must be done to show that poetry is *not* organized violence against language. This is where the present approach most radically differs from their conceptions.

language differs from that of ordinary conversation in that it is significantly more ambiguous, then this must be reflected in contours of stress and intonation as well: some contours used in the delivery of poetry will not be heard “in the flow of ordinary conversation”. Within the framework of these considerations, Chatman seems to answer his own objection when he remarks on one of Loesch's “non-disambiguating constructions” of the sentence “I’ll move on Saturday”: this “seems slightly more genuine but is still so exaggerated that occasion to use it would seem rarely to arise” (285). “In the flow of ordinary conversation” we usually do not wish to communicate in one utterance both possible meanings of “I’ll move on Saturday” or of any other sentence (except for witty punning). Thus, in the performance of poetry, deviations from conversational contours are inevitable.

So, when we say “the contours of stress and intonation in the reading of this poem are natural”, we do not necessarily mean “such as may be heard in every day conversation”. In the reading of poetry, naturalness is preserved within a stylized framework. Intonation and stress pattern are distorted, but distortions are restricted to a necessary minimum. A more positive meaning of naturalness would be *congruence* of intonation and stress contours. Paradoxically enough, in order to *preclude* unnaturalness (incongruity) when semantic, syntactic or metric complexities arise, the performer may choose from the outset to distort, to stylize these contours. The corpus examined in the present study suggests that this tendency is, indeed, overwhelming.

#### *Enjambment and Related Meanings*

Let us begin with an example involving two “alternative intonational patterns and their associated meanings”. The Hebrew poetess Rachel died at an early age, of tuberculosis. In her last years she wrote poems in which she declared that she had no more claims upon life; she had already accepted her untimely death. Some critics have detected in these poems unconscious signs that suggest an opposite attitude. One of the most interesting examples is the following:

2. To life that hastens on before me I lift up my eyes  
Calmly. For me, any gladness is unexpected gladness.  
Let it be seven times blessed.

In terms of the present theoretical framework, the enjambment from line 1 to 2 can be described as follows: there is a conflict between the linguistic unit (the sentence) and the versification unit (the line). There arises a perceptual problem: how can the conflicting units be performed, such that both should equally be established in the listener’s perception. This is where the pattern of performance comes in, as a solution to a perceptual problem. The effect of the enjambment is further enhanced by two components. First, this is a three-line-long stanza, the third line rhyming

with the first. Second, the shorter the run-on segment, the more it resists being stretched over two lines; here it is (“calmly”) exceptionally short. From the semantic point of view, this enjambment points up an interesting ambiguity. “I lift up my eyes”, and “I lift up my eyes calmly” mean opposite things: in Hebrew, “I lift up my eyes to” is an idiomatic expression, meaning “I long for”, whereas “I lift up my eyes calmly” suggests “I am indifferent to”. One very plausible interpretation of these verses is as follows: the speaker, consciously and intentionally, claims that she is indifferent to life, that she accepts death; her text, however, suggests, in spite of herself, that she still craves for life, and is far from indifferent. It would appear that the speaker has convinced herself that she had come to terms with her situation, and is unaware of her wish to live.

The question is whether the vocal performer has the option to convey this ambiguity. Chatman would answer this question in the negative: “the performer is forced to choose between alternative intonational patterns”, one that stops at the end of the line, and one that stops at the end of the sentence. In case the performer stops at the end of the sentence, the speaker renounces life. In case, however, the performer stops at the end of the line, the ambiguity is clearly indicated, but with the wrong tone. Stopping at the line-ending indicates the craving-for-life construal. The brusque addition of “calmly” turns the tables, with a jesting wink, as it were: I have played a prank on you, I am not yearning for life, I am indifferent to it. I am not suggesting that the only correct construal of these lines is that the speaker represses her craving for life, and is unconscious of it; I merely insist that one should have access to some vocal performance that does not rule out such a possibility. I submit that these verse lines are susceptible of more than one “non-disambiguating” performance.

Before offering my solutions, we should adopt a distinction common in phonology. Levin (1962: 368) notes that in oral delivery or performance, the voice dynamics can be said to communicate two different types of information: paralinguistic features provide information about the speaker, whereas linguistic features provide information about the message.<sup>3</sup>

I would suggest two solutions of the problem encountered in Rachel’s poem. One solution would be ad hoc, and make use of paralinguistic devices: the performer would superimpose a pattern of hesitant pauses upon the syntactic sequence of the text, as if speaking in some pensive mood. One of these pauses would coincide with the line ending, so that the listener would be uncertain whether the pause is cuing

<sup>3</sup> Paralinguistic features are usually irrelevant to the rhythmicity of a performance, *unless they interact with phonological and metrical features*. Thus, for instance, Gielgud in his readings of Hamlet’s soliloquies on Brunswick LAT 8015 preserves, to an unusual degree, the regular “graphic” metre. In order to prevent the impression of “childish”, “Minstrel-like” sing-song, Gielgud “masks” this unnatural regularity with vocal features giving paralinguistic information about Hamlet’s state of mind, such as his “hypermanic” outbursts. This device becomes prominent, by contrast, when, on the same side of the record, the paralinguistic “vocalisations” are necessarily toned down in the reading of the Sonnets.

the line-ending, or is part of the sequence of hesitant pauses. In such a case, all suggestion of jesting would be eliminated. The other solution is more linguistic, more central to the intonation system, and would make use of the acoustic cues for intonation. The end of an intonation curve may be cued by a variety of cues: by straight-forward stopping, by slowing down on the last one or two syllable(s), or by reaching the reference tone of the musical key of the intonation curve (cf. Chapter 9). In the present instance, the performer could resort to conflicting cues, say, not stopping at the end of the first line, but slowing down on its last word, and ending on the reference tone of the musical key. When I raise this problem in graduate seminars, there are those students who reach one or both of these solutions on their own accord.

The foregoing example poses conspicuous problems of interpretation on the one hand, and is a prose translation (that is, it has no metre), on the other hand. This enabled me to discuss it without going into phonetic technicalities. Contrary to the belief of many literary critics, such instances where enjambment suggests different or even conflicting meanings are the exception rather than the rule. In the overwhelming majority of instances, the enjambment merely affects the perceptual dynamics of the reading—in a significant, though not semantic manner. In the ensuing chapter I shall consider empirical issues, involving phonetic cues.

#### *Enjambment and Conflicting Cues*

In my book (Tsur, 1977: 134 and passim) I suggested that where linguistic stress pattern or intonation pattern conflict with the patterns required by versification, the performer may have recourse to conflicting cues. This applies, as I have shown at length in Chapter 3, both to enjambment and to instances where the linguistic stress pattern deviates to one degree or other from the metric pattern. These instances may be explained in terms of the hierarchy of cues provided by Knowles, supplemented by his notions of early and late peaking (see Chapter 3). Barney (1990), who had not been acquainted with my work, found compelling support for my predictions, by investigating two poems by Philip Larkin and John Betjeman read by the authors. In this, he preceded me in the application of Knowles's hierarchy of boundary cues in the study of enjambment.

We turn now to a quatrain with two enjambments from Shakespeare's Sonnet 3, as performed by the Marlowe Society (I shall discuss them in a reverse order):

- |                       |   |
|-----------------------|---|
| Listen to sound filwa | 3. For where is she so fair whose unneared womb<br>Disdains the tillage of thy husbandry?<br>Or who is he so fond will be the tomb<br>Of his self-love to stop posterity? (5-8) |
|-----------------------|---|

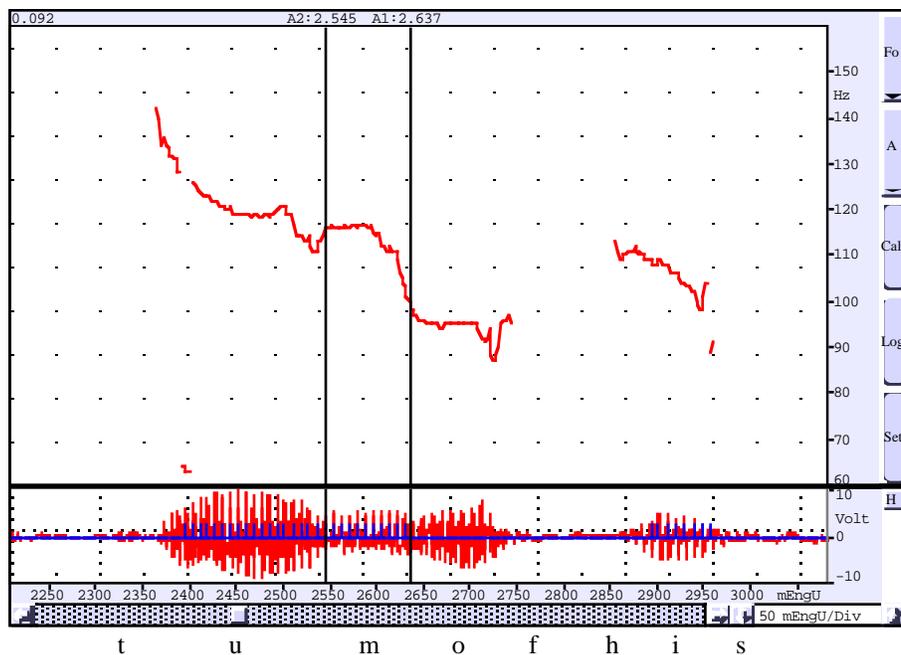


Figure 1 Wave plot and pitch extract of “tomb of his”

It is remarkable that the reciter solves the problem at the end of lines 5 and 7 by different (in fact, opposite) means. The enjambment from line 7 to 8 is rather mild. The performer uses conflicting phonetic cues to indicate continuity and discontinuity at the same time. On the one hand, he observes no pause whatever. “Of” follows immediately after “tomb”. Discontinuity is indicated mainly by pitch movement. There is a long-falling pitch on *tomb*, falling from 142 Hz through 121 to 111 Hz on /u/, sustained between 116 and 117 Hz, then falling to 100 Hz on /m/. Hence it falls through 95 to 88 Hz rising again to 97 Hz on “of”, whence it jumps to 113 Hz on “his”, falling to 98 and rising again to 104 Hz. Such a falling pitch contour with a conspicuous “early peak” on “tomb” over-stresses the syllable as well as over-articulates the line-ending by intonation. Then pitch direction changes again on “of”, initiating a rising movement. In this way, the words “tomb of” distinctly belong to two different perceptual units (as required by the verse lines), while the lack of pause indicates that the syntactic unit is continuous.

For years I have been haunted by an intuition that in some performances of enjambments a mysterious process takes place. The performer emphatically closes the verse line, but in the air somehow there remains a magic pull forward to the next verse line. Some sustained energy appears to reverberate in the reciter’s voice, beyond its endurance. I thought that “perceptual forces” may be at work; and, indeed, I could point them out in instances where the syntactic or metric units intruded one upon the other, and threatened each other’s integrity (Tsur, 1977: 157-174; 1992a:

132-148). They resulted from the incursion of some metric boundary into a syntactic unit, or of some syntactic boundary into a metric unit. But, it would appear, these instances were independent from the pitch movement of the reciter's voice. And the source of perceptual forces in the reciter's voice hopelessly evaded detection.

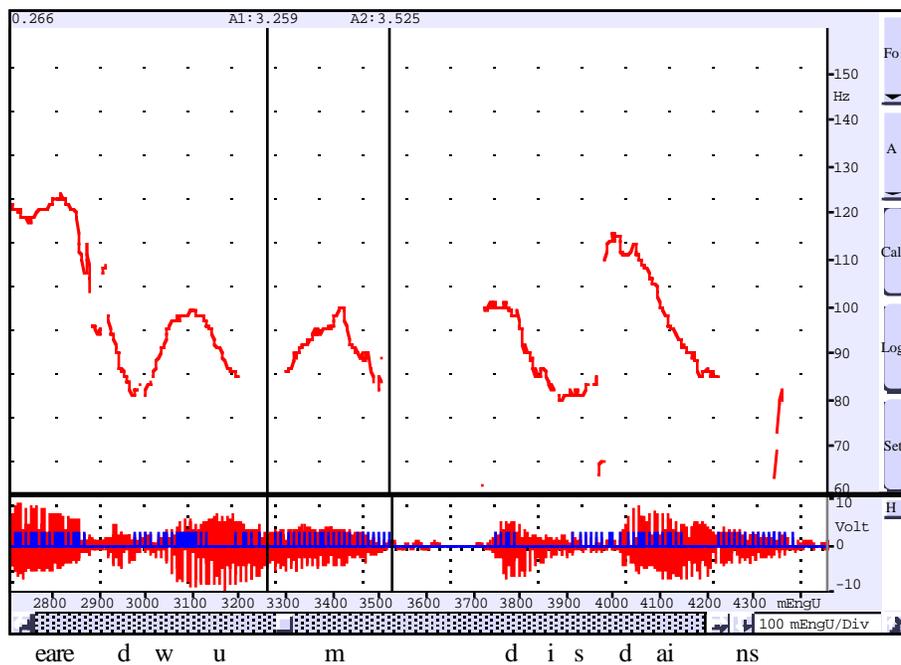


Figure 2 Pitch extract of "(eare)d womb disdains"

As I suggested in Chapter 3, the Gestalt assumption that a perceptual unit tends "to preserve its integrity by resisting interruption" is valid not only when the perceptual unit is a syntactic phrase, but also when it is a sequence of phonemes as a word, or one single phoneme. At this level, an accent point may be just such an intruding event. When an intruding event falls in the centre of a perceptual unit, it reinforces its balance and stability. When it falls off centre, there arises a perceptual force pushing toward the nearest point of stability: the centre, or one of the boundaries, whichever is nearer. Fodor and his colleagues have most dramatically demonstrated this on the syntactic level. Knowles's discovery of early and late peaking can be translated into this terminology as follows: when a pause cues a major tone group boundary, it is stable and unambiguous, and needs no reinforcement by "perceptual forces"; an accent point that falls in the centre reinforces its stability. "Early peaking" intrudes upon the phonetic category (vowel or sonorant) between the centre and the first boundary, nearer to the boundary; so it pulls backward, as shown in Figure 1 with reference to "tomb of". "Late peaking" intrudes upon the phonetic category between the centre and the second boundary, nearer to the bound-

ary; so it pushes forward. In Figure 2 (“womb”), the peak falls *after* the syllabic crest, in the middle of the syllabic slope, the /m/. So it exerts an exceptionally strong forward pull from line 5 to 6. The line ending intrudes here between subject and predicate. Unlike in the enjambment from line 7 to 8, the reciter observes here a longish pause at the end of the line (181 msec); at the same time, the listener perceives here a powerful propelling drive across the pause to the next line. Some listeners perceive here a “magnetic pull”, as it were, across the “abyss”. By now we strongly suspect that whenever such a power is detected, one should look for late peaking. Indeed, when one isolates on the spectrogram the final /m/, one finds that it is extremely long (262 msec), considerably longer than the preceding /u:/ (172 msec). When the vowel and the ensuing sonorant of “womb” are isolated on the computer, one hears exactly what one sees on the F<sub>0</sub> track: a falling curve on /u:/, and a rising curve, constituting a late peak in the middle of /m/.<sup>4</sup> Gerry Knowles comments (oral communication) that a late peak need not be very high to be effective; here it is just slightly higher than the other peaks in this word. Late peaking appears to be one of the most powerful means at the reciter’s disposal that he may use for handling opposite tendencies arising in metric deviances; and the most evasive too. Long ago I noticed that the solution of the problem in many delivery instances is somehow related to some rise of pitch, interrupted but leading forward. When I looked at the F<sub>0</sub> curves, there was no steeply rising intonation contour there that could consistently justify such intuitions. The dynamics of late peaking and of perceptual forces as discussed in Chapter 3 “strike home” exactly at those intuitions, and appear to account for them in a very satisfactory manner.

#### *Enjambment and Unstressed Syllable in s Position*

Now consider the first two lines from Keats’s Elgin Marbles sonnet. They offer a goldmine of problems to be considered in the present study; and Douglas Hodge offers in his reading solutions worth studying at length. In Chapter 6 I discussed the emphatic stress Hodge assigns to the first syllable of “unwilling”, resulting in a stress maximum in a weak position. In Chapter 8 I discuss the “bisyllabic occupancy” of one metrical position in “heavily”. In Chapter 9 I discuss the problems arising from the exceptionally long pause observed by Hodge after “weak”. I claim there that the perceptual acceptability of this long pause depends on whether or not the verse line is properly closed from the perceptual point of view.

4. My spírít is tóo wéak. Mortáality  
w s w s w s w s w s w s  
 Wéighs héavily on me like unwílling sléep  
w s w s w s w s w s

<sup>4</sup> The lengthening of terminal phonemes is usually regarded as a segregating agent. Some of our examples, however, appear to suggest that when lengthening is coupled with late peaking, it may generate an exceptionally powerful forward drive.

Now a proper perceptual closure is not an easy thing to achieve at the end of this line, for two reasons: the sentence is run on from the first to the second line; and the last, crucial strong position of the first line, that should close the metric unit, is occupied by the last, unstressed, syllable of a polysyllabic. Such a state of affairs puts the reciter to a demanding test. And Hodge offers a masterful solution.

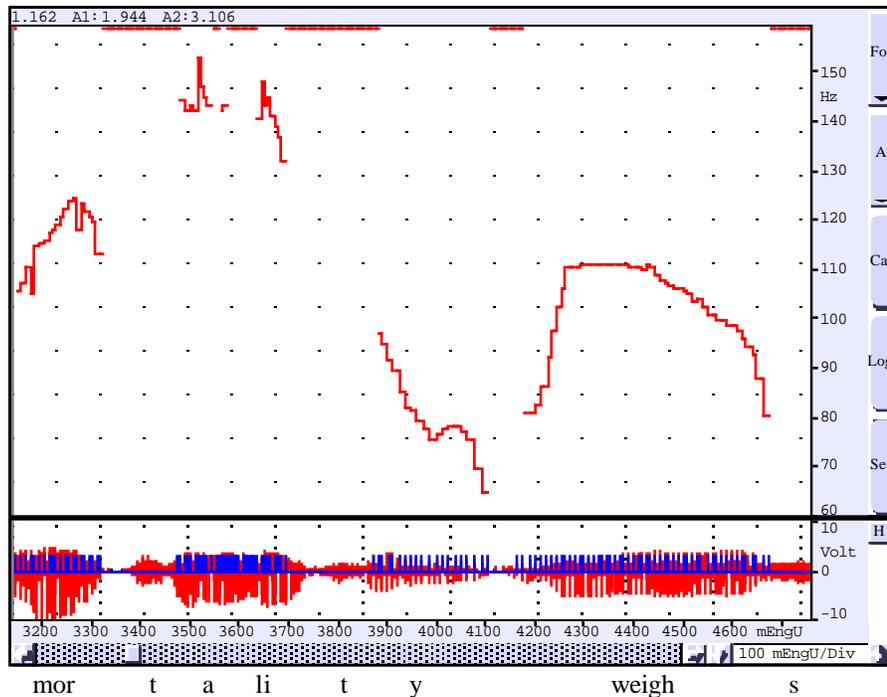


Figure 3 Wave plot and pitch contour of “mortality weighs”

[Listen to sound file](#)

The intonation contour of “mortality” as shown in Figure 3 is noteworthy. The contour of “mor-” has the shape of an independent “hill”, ranging from 102.558 to 124.576 to 118.548 Hz. The contour of “-ta-” resets to 141.346, then to 153.125 Hz, and then falls to 140.446 Hz. Thus, this stressed syllable becomes a pivotal point initiating an “internally defined prosodic pattern”, continuing on the contour of “-li-”, moving from 139.557 to 147.987 to 132.036 Hz. This falling movement terminates on an emphatic terminal contour on “-ty”, falling from 97.137 to 75.514, where a humpback begins culminating in 78.191 Hz, finally falling to 65.044 Hz. As we shall see, this humpbacked portion is quite significant.

This pitch movement generates a rather unusual and forceful dynamics. The first syllable of “mortality” has a duration (222 msec) and a rising-and-falling intonation contour that would suffice to render it exceptionally prominent; but owing to the ensuing reset of pitch which renders the next syllable even more prominent—in fact,

making it the stressed syllable of the polysyllabic—it assumes a different character. It is fairly isolated by its intonation contour, followed by a brief pause; its isolation and relatively long duration are perceived as an arrest before vaulting upward to the pitch of the stressed syllable. Then the reset of pitch on the second syllable initiates an impetuous forward movement, leading toward a firm line boundary confirmed by a stressed syllable in the tenth (strong) position. This stressed syllable, however, is never to come: “mortality”, as we have seen, ends with an unstressed syllable. What is more, the clause is run on to the next line, and there is no measurable pause between the two lines.

Notwithstanding, there is a feeling that the verse line is somehow closed, that it does put up a resistance against the forward-pushing pitch movement. This closural quality can be ascribed to the duration and the falling contour of the last vowel. When listening to the whole line, there is a feeling that this contour is exceptionally long and falls exceptionally low. Furthermore, one *may* discern a slight inflection toward its end, as reflected in the graph. There is no objective measure to determine whether a syllable is longer than it ought to be, or a contour falls lower than it ought to fall. Still there may be some not-too-straightforward ways to support one’s intuition concerning exceptional duration or fall of intonation curve. First, it would not be a too great exaggeration to expect the last two syllables of “mortality” to be of roughly equal duration. When measuring them, however, we find that [ti] is more than twice as long as [li]; we obtain [li]: 159 msec, and [ti]: 325 msec. When comparing the vowels only, we obtain an insignificantly higher ratio: 103:222 msec. The duration of the last vowel *until* the humpback is 131 msec only. In an attempt to ascertain the effect of the portion beginning with the humpback in the intonation contour, I have removed it from the sound sequence. The truncated word “mortality” sounded perfectly natural, regarding the intonation contour as well as vowel quality and duration. When comparing the two versions of the word, one may hear the difference of length, of intonation base-line, and the inflection on the untruncated contour. There is, however, an additional difference too. The original version is somehow “rounded out;” but this had nothing to do with the humpback-shape of the intonation contour.

Curiously enough, the presence of this “coda” seems to have two opposite effects. On the one hand it enhances the sense of termination (foregrounding the versification unit, the line); on the other hand, it seems to suggest continuity between the words “mortality weighs”, enhancing the run-on syntactic unit. What is the source of this sense of continuity? When the humpback portion was isolated, one could tell that the vowel quality in this portion is different from that of the preceding portion: the aperture of the [i] has been gradually constricted and rounded, obtaining something like a dark [j], almost [u]. This constriction can be construed as the result of an articulatory gesture, coarticulating the [i] with the ensuing /w/. One important effect of this gesture is highlighted when the words “mortality weighs” are sounded together, in the truncated and the untruncated versions. As I said, there is no measurable pause between the two words. A discontinuity is observed in the

truncated version, as compared to the untruncated one. This discontinuity can be explained as follows: coarticulation typically enhances continuity; the disappearance of coarticulation generates a sense of discontinuity. We have already seen two aspects of this “coda”: the unusual duration of the vowel and the unusually deep fall of the intonation contour have a conspicuous terminal effect. I have already mentioned that when the “coda” is excised, both the length of vowel duration and of intonation fall appear to be perfectly natural. This may indicate that in the untruncated version both vowel duration and intonation fall are, indeed, unusually long. But the vowel quality of this “coda” also has an aspect that may contribute to the terminal quality of the syllable. As Cooper and Ross (1975) have pointed out, in a sequence of two syllables in which the nuclei are an unrounded front vowel and a rounded back vowel respectively, it is felt to be more natural if the rounded back vowel comes last. Thus, “ping-pong, sing-song, ding-dong” are perceived as more natural than “pong-ping, song-sing, dong-ding.” It has been suggested above that in the course of the coarticulation of [i] with the ensuing /w/, the unrounded front vowel gradually turns into a rounded back vowel. Thus, this coarticulatory gesture has two opposite aspects: coarticulation generates a feeling of continuity, but the transition from an unrounded front vowel to a rounded back vowel generates a feeling of termination and, therefore, discontinuity. This appears to be in harmony with the perceptual demands of enjambment: the ending of the line and the continuity of the clause must be perceived simultaneously.<sup>5</sup>

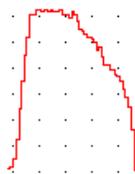
#### *Changing the Syllable-to-Position Correspondence*

We have been treating the verse line as a “whole” in the Gestalt sense, that is, as a system that determines the character of its parts. In the preceding chapters we observed how the linguistic units are grouped and articulated so as to save mental processing space required for the perception of the regularly alternating weak and strong positions, in addition to the linguistic sequence. We followed the tensions and forward drives arising from the mismatch of strong and weak events in the two concurrent dimensions, and the relief and focal stability achieved when metre is confirmed again by a stressed syllable in a strong position. So far, we have explored the whole as a system among the parts of which a more or less constant correspondence can be established which, in turn, determines the groupings and articulations required in the linguistic dimension. In what follows, I shall report a small experiment, in which I have manipulated the correspondences established in a reading already recorded, in order to explore the perceptual qualities of the (unchanged) vocal dynamics when their correspondence to weak and strong positions is changed. Such a manipulation seems to bear witness to the psychological reality we have postulated for the versification units and their perceptual interaction with language.

<sup>5</sup> I sent Mr. Hodge the paper eventually published in *Style*. Not surprisingly, he said he was not aware of the vocal manipulations he made, only of their effect.

Let us return to excerpt 4. Here, the last strong position of the first line is occupied by an unstressed syllable; still, the end of the verse line is clearly articulated by a very long-falling intonation curve. Line 2 begins with an exceptionally long and strongly stressed syllable (“weighs”). There are eleven syllables in this line, but only ten positions available. As I argue in Chapter 8, in this performance, the two syllables “-ily” (in “heavily”) are assigned to one position, with the /l/ strongly under-articulated.

To understand some wider issues related to the whole as a system that determines the character of its parts, I have performed a small perceptual experiment, by electronically mutilating Hodge’s reading of Keats’s text. I have removed the speech signal of the last syllable of “mortality” at the end of the first line, and listened to the results. To be sure, semantically “mortali weighs” is nonsense; but I was listening to the rhythmic, not the semantic results. In this way, some of the syllables were “moved to the left”, with respect to the versification units: “weighs” moved from the first (weak) position of the second line to the last (strong) position of the first line; the first syllable of “heavily” moved to the first position of the line, and a separate metrical position became available for each one of its syllables. Not too surprisingly, the long and intonationally over-articulated “weighs” turned into an emphatic closure of the verse line. What is perhaps more surprising is the change perceived in the effects of the word boundaries. It will be remembered that the inverted u-shaped intonation contour of the word may perceptually separate it from what precedes and from what follows it:



This contour is neither preceded nor followed by a measurable pause. In the intact version, its discontinuity with the preceding contour of “-ty” is perceived as the new start of a distinct versification unit (in spite of the coarticulation of the two words across the line ending). A word like “weighs” in a weak position is a grave infringement upon metre, arousing a powerful perceptual pressure as well as powerful cravings for the reinstatement of metre. When occurring in the first weak position, the closing contour is perceived as the over-articulation of the linguistic unit to make mental processing space available for the perception of the (conflicting) versification pattern, present only as the listener’s “metrical set”. Here a powerful forward pressure is perceived across the discontinuity, and the word is perceived as segregated from, and emphatically grouped with, the next syllable, “hea-”, which reinstates metre in a strong position. Thus, the discontinuity between “weighs” and “hea-” is perceived as relatively minor, that is, relative to the discontinuity preceding it. When the last syllable of the first line is deleted, “weighs” takes its place, emphatically closing the line. By the same token, the discontinuities generated by the intonation contour change their character. Now it is the

discontinuity after “weighs” that is perceived as a major break indicating a line boundary, while the break preceding it becomes a relatively minor one, a slightly greater than necessary break meant to enhance the “requiredness” of the last, closing syllable of the line.<sup>6</sup> This perceived diminishing of the break preceding “weighs” is the more remarkable, since by excising the preceding syllable we have also removed the portion that co-articulates the /i/ with the /w/.<sup>7</sup>

In English versification, stress is not infrequently displaced from the second (strong) to the first (weak) position. This sounds quite acceptable with mono- or bi-syllabic words; but sometimes we encounter this with tri-syllabic words too. In the truncated version of the passage the first, stressed syllable of “heavily” moves, as I have said, to the first, weak position of the line, and its next two syllables gain, each one, a separate position of its own. When listening to this version, these two syllables appear slightly under-articulated for occupying two separate positions, but not really unacceptable as such. One might suggest, then, that most probably the under-articulation of the [l] in “heavily” facilitates the squeezing of two syllables into one metrical position, but this process also relies on the strong perceptual pressure generated by “weighs” in the first (weak) position, and the counter-pressure exerted by the (rather evasive) caesura perceived after “me” (cf. Chapter 8).

This analysis also answers an intriguing question which I haven’t asked: whether the under-articulation of the [l] in itself suffices for assigning the two syllables to one metrical position, or whether further elements too are needed, such as powerful perceptual pressures arising from the mismatching of weak and strong events in the metrical and the linguistic dimensions. In this instance, at least, further perceptual pressures are required.<sup>8</sup>

#### *The Quatrain as a Whole*

This section compares performances of the first quatrain of Shakespeare’s Sonnet 107. The readings are by leading British actors: the Marlowe Society, John Gielgud and Simon Callow. (Readings of lines 2 and 4 were discussed at length in Chapter 5).

5. Not mine own fears, nor the prophetic soul  
Of the wide world dreaming on things to come,

<sup>6</sup> “Requiredness” is the demand one part of the perceptual field may have on the other (cf. Tsur, 1972).

<sup>7</sup> I have attempted to retain this co-articulating portion, hoping that it would blend with the /i/ of the preceding syllable; but it was perceived as an additional syllable, destroying the experiment.

<sup>8</sup> This is quite different from what we shall find in Chapter 8, in the Marlowe Society’s reading of excerpt 13.

[Listen to sound file: Gielgud](#)

[Listen to sound file: Callow](#)

*Enjambment*

235

[Listen to sound file: Marlowe Society](#)

Can yet the lease of my true love control,  
Supposed as forfeit to a confined doom.

In an important respect, Gielgud's reading of this stanza is unusually complex and unusually adequate. In all our investigations so far we have examined rhythmical solutions offered to problems arising within a single line, or enjambments from one line to another. The present quatrain contains a single clause; and Gielgud attempts to preserve both syntactic continuity and the discontinuities required by the line endings throughout the stanza. What is more, he makes a remarkable effort to preserve the relative weights of the versification boundaries. The Marlowe Society too make a remarkable attempt to the same effect.

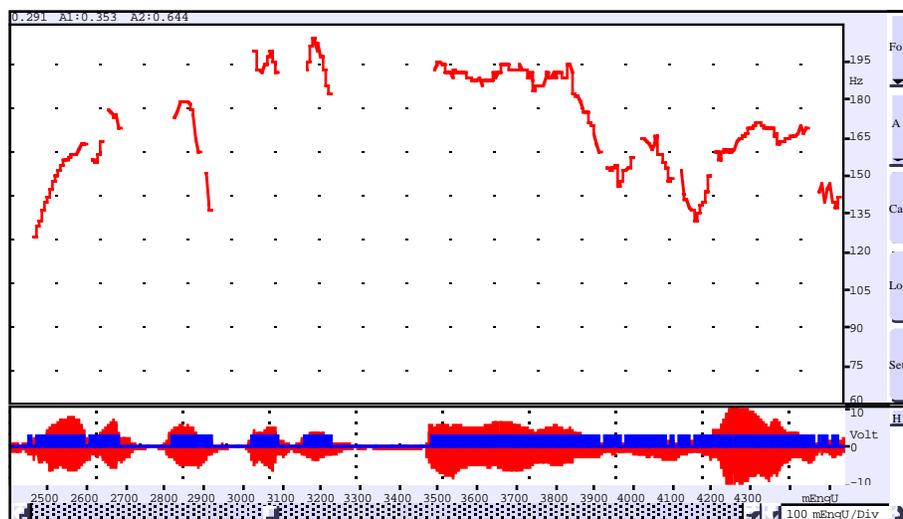


Figure 4 Wave plot and F<sub>0</sub> extract of "nor the prophetic soul of the wide" in Gielgud's reading

From the point of view of versification, we have here a symmetrical quatrain, with an **abab** rhyme pattern. In order to obtain two symmetrical halves in such a quatrain, the first and second lines must be grouped together, likewise the third and fourth lines. As a result, there is a hierarchy of versification boundaries, and the performer must suggest arrest and continuity at the same time at the end of the first line; and a stronger arrest with continuity nonetheless, at the end of the second line. This we may expect to be performed by conflicting cues, effectively signalling stopping and continuity at the same time. The even-numbered lines require a more terminal quality than the odd-numbered ones; and the fourth line more so than the second. Gielgud's and the Marlowe Society's readings of this quatrain attempt to suggest such a hierarchy of a whole stanza. By contrast, Callow attempts to generate

two-line units at most, grouping together an odd-numbered and an even-numbered verse line suggesting enjambment in one way or other.

As Figure 6 shows, the /m/ in “come” is disproportionately longer in Gielgud’s reading than the preceding vowel. A comparison of the duration of “come” to the other words too reveals an excessive length. Thus, for instance, “things” is 319 msec long, “come” — 591 msec long; even the final consonant /m/ is longer than the entire word “things” (403 msec). By comparison, in the Marlowe Society’s reading the duration of “come” is 559 msec, of /m/ 303 msec, of “things” 406 msec; in Callow’s reading their duration is 406 msec, 209 msec and 411 msec respectively. I have been asked several times, what could be the reason for such an unusual lengthening of the /m/ in Gielgud’s reading. For an answer, consider the syntactic structure of the first clause of the sonnet:

6. Not mine own fears, nor the prophetic soul  
 [...]
   
 Can yet the lease of my true love control [...]

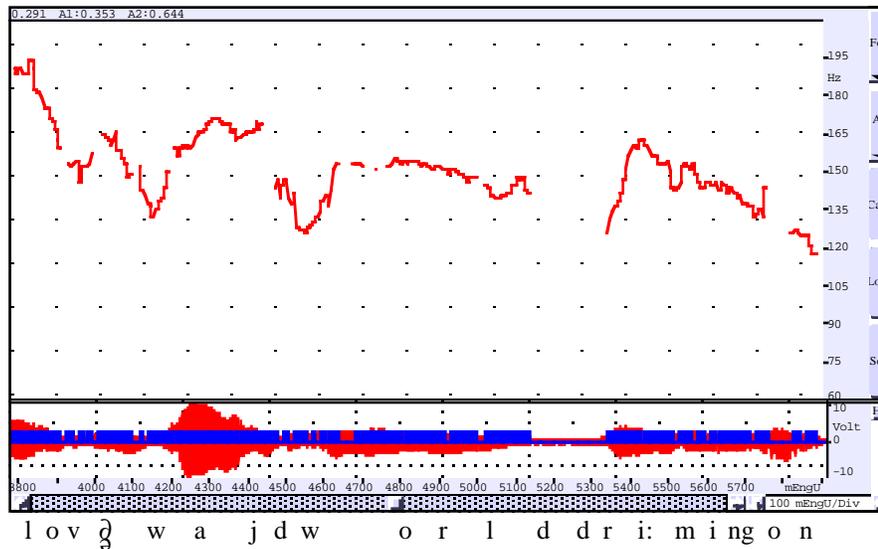


Figure 5 Wave plot and F<sub>0</sub> extract of “[ɪ] of the wide world dreaming on” in Gielgud’s reading

The subjects of the clause are in the first line; the predicate — in the third line. The second line contains a long phrasal elaboration of the second subject in the first line, plus a subordinate clause. The genitive phrase “the [...] soul” is straddled in an enjambment between the first and second line; the fourth line contains a post-nominal participial phrase. In traditional syntactic terms, then, we have here a single clause running from the beginning of the first line to the end of

the fourth. Now, irrespective of actual punctuation marks, the flow of speech must be strongly punctuated (or articulated, if you like) by the line endings (I am using the verb “punctuate” in the combined sense of “divide” and “give force to”). What is more, there appears to be a hierarchy of such punctuations: at the end of the second line this punctuation must be considerably stronger than at the end of the first line. The reason for this concerns both syntax and versification. From the syntactic point of view, the end of the first line punctuates the stream of speech, as we have seen, in the middle of a genitive phrase, whereas the end of the second line punctuates it at the end of the subject phrases, before the VP (see Figures 4, 5 and 6).

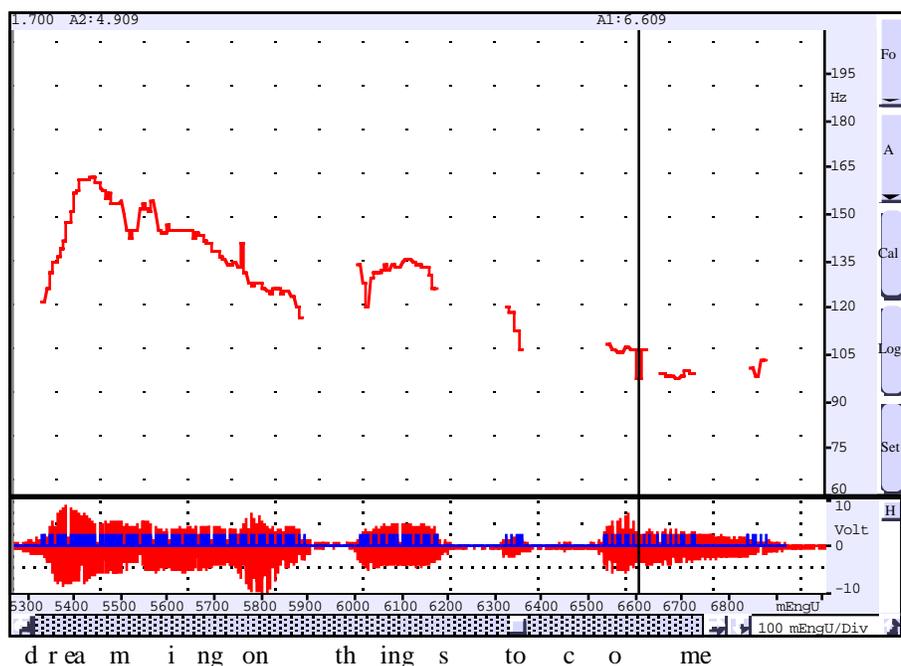


Figure 6 Wave plot and  $F_0$  extract of “dreaming on things to come” in Gielgud’s reading

Figure 6 shows a falling intonation contour during the second segment of line 2. The intonation contour of “things” ends at 126.724 Hz; that of “to” falls from 119.837 to 106.522 Hz; that of the vowel of “come” moves from 108.088 through 97.137 to 106.522 Hz. In other words, the contour is gradually falling on the phrase, and not steeply on the last syllable. Finally, the contour of the /m/ is sustained around 98.000 Hz, whence it rises, slightly, to 103.037 Hz. When the /m/ is isolated on the computer, this minute rise can distinctly be heard. When the phrase “things to come” is isolated, one can hear a distinct terminal intonation contour which, nevertheless, in some mysterious way signals, at the same time, continuation to come (owing to the sustained then rising intonation on the /m/). In

this way, the excessive lengthening of the /m/ very effectively indicates both continuity and punctuation at the same time. In all three performances there is a considerable pause after “come” at the end of line 2, but in the Marlowe Society’s it is 1.76 times longer than in Gielgud’s (959 vs. 544 msec); in Callow’s reading it is only slightly longer (562 msec), but is reinforced by a highly resolute terminal intonation contour (cf. Figures 8 & 13), while Gielgud’s and the Marlowe Society’s contours suggest some continuation to come.

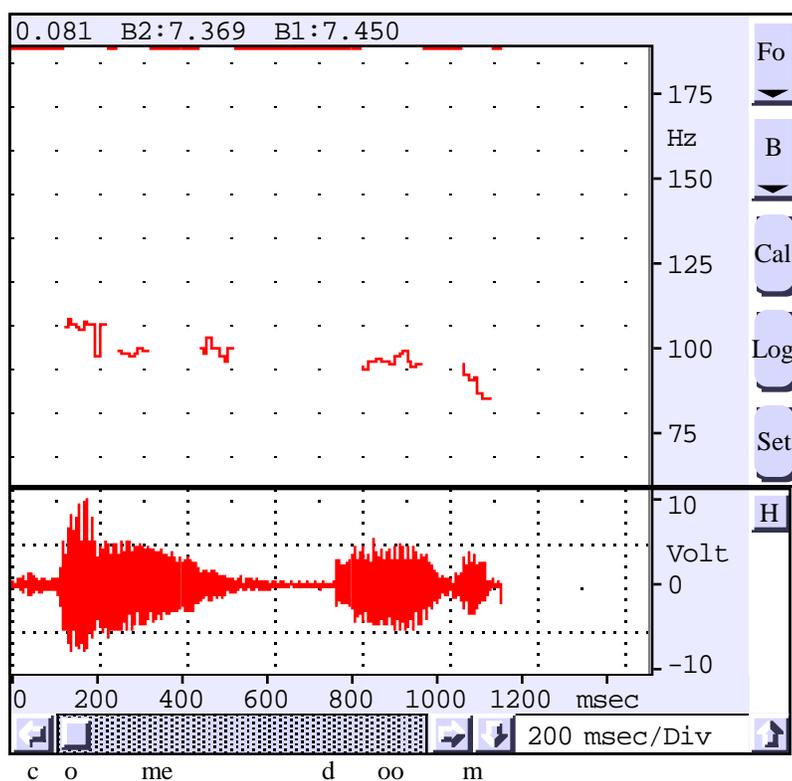


Figure 7 Wave plot and  $F_0$  extract of “come” and “doom” in Gielgud’s reading

Now consider Figure 7. It conveys the wave plot and  $F_0$  extract of “come” and “doom” in Gielgud’s reading. After some amplification, a further, insignificant portion appears following the minute rise on “come”. When we compare the intonation contours of the last words of lines 2 and 4, we obtain an indication of the perceptual shape of the whole stanza. We have seen that line 2 ends with a final, closing intonation contour indicating, nevertheless, some continuation; the fourth line ends with a more deeply and more steeply falling contour, suggesting a final closure of the stanza.

By contrast, consider the relation between the two endings in Callow's reading (Figure 8; cf. Figure 13). Here the terminal intonation on "come", at the end of line 2 is very dominant, and falls roughly to the same pitch as the terminal intonation on "doom" at the end of line 4. Thus, the versification boundary at the end of line 2 is in no way subordinated to that at the end of line 4.

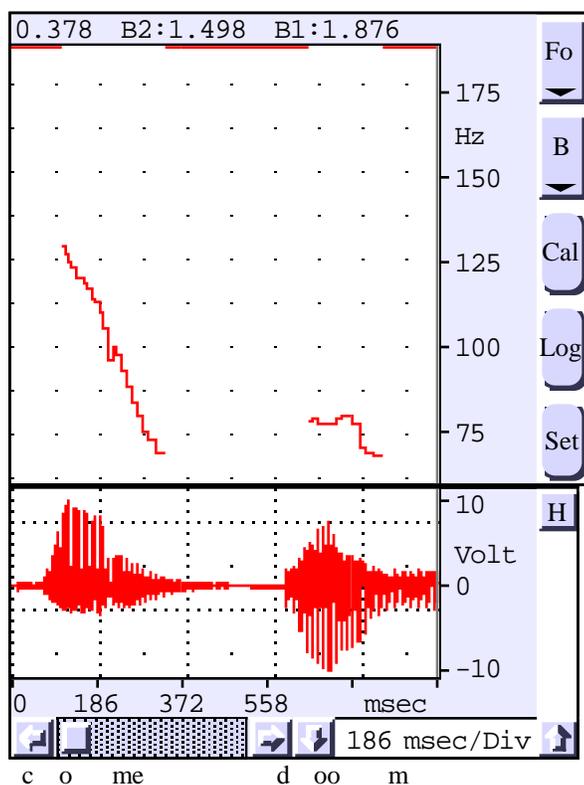
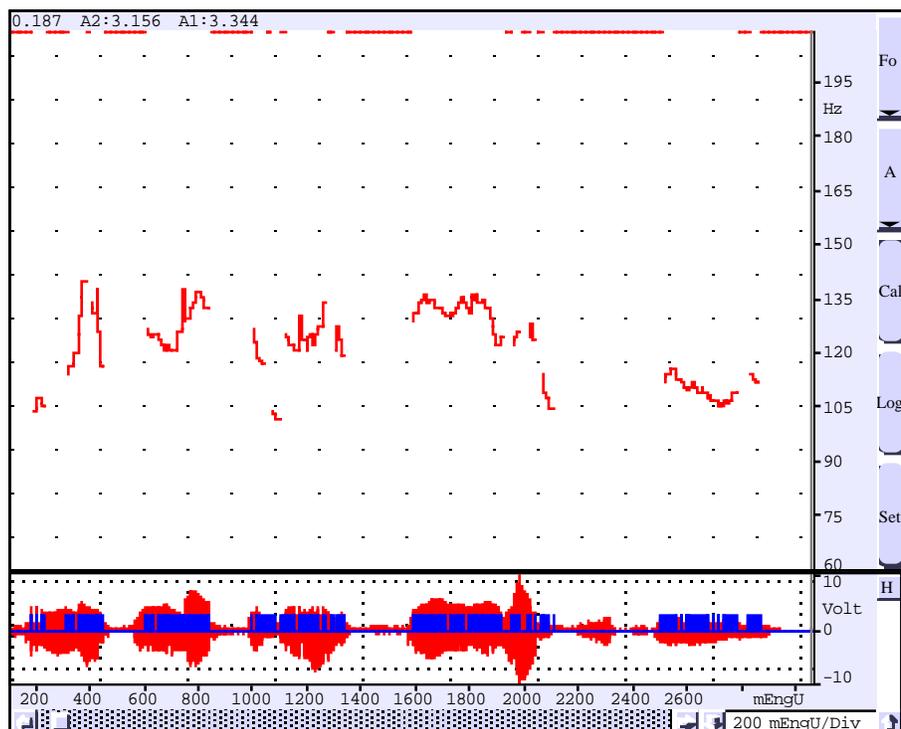


Figure 8 Wave plot and  $F_0$  extract of "come" and "doom" in Callow's reading

At the end of line 1 of Gielgud's reading, one hears a distinct "punctuation", or articulation, without disrupting continuity. Figure 4 clearly shows how this is done. This distinct punctuation is due to the small obstruction at the very end of the /l/ in "soul", and the change of direction at precisely this obstruction. On the other hand, the conspicuously continuous intonation contour from "soul" to "of the" takes care of continuity. The feeling of line closure is emphatically reinforced by the long fall of intonation contour on, and the excessive duration of, "soul": 550 msec; by comparison, the duration of the trisyllabic "prophetic" is 584 msec. After line 3 there is a 464 msec pause, warranted by the line ending and the ensuing post-nominal participial phrase. This takes care of the articulation of the line ending, reinforced by

the falling intonation on the vowel of the last syllable. At the same time, a distinctly perceptible rise of intonation on the final /l/ suggests that some syntactic continuation is still ahead (Figure 9).



Can yet the lease of my true love control  
 Figure 9 Wave plot and  $F_0$  extract of “Can yet the lease of my true love control” in Gielgud’s reading

We have, then, an admirably appropriate performance of a more than usually complex quatrain. Syntactically, there is a single clause in this quatrain, appropriately continuous in performance, but effectively punctuated (or articulated) at the line endings, without improperly arresting the syntactic flow. Moreover, there is a hierarchy of line endings in the quatrain which, too, is matched by a hierarchy of line-final punctuations in performance. The even-numbered lines require a more terminal quality than the odd-numbered ones; and the fourth line more so than the second. The second line, as we have seen, is closed by an excessive lengthening of the last consonant, and a falling intonation, while continuity is suggested by a minute rise on the /m/; this is just enough to let the slightly steeper and more deeply falling intonation contour of the fourth line indicate a more final quality.

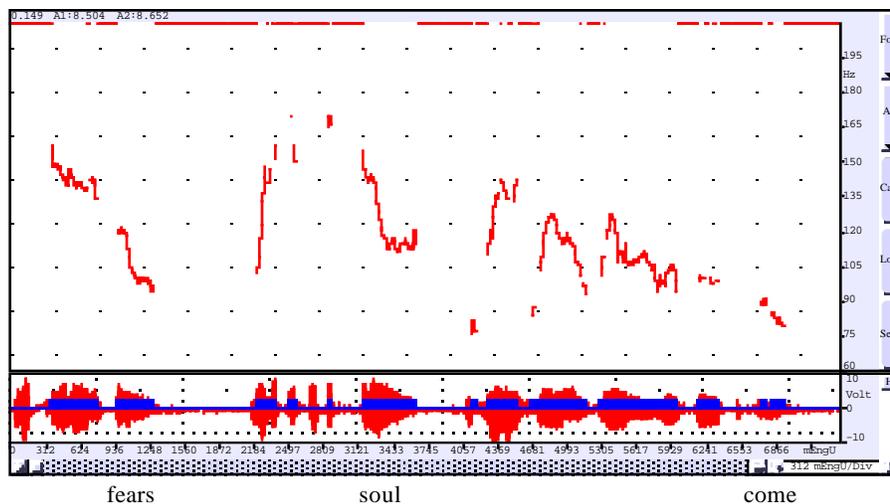


Figure 10 Wave plot and  $F_0$  extract of “Not mine own fears, nor the prophetic soul / Of the wide world dreaming on things to come” in the Marlowe Society’s reading

The Marlowe Society too give some indication that they have a conception similar to Gielgud’s, but not in its extremity. Unlike Gielgud, they are quite liberal in the use of pauses, while they manipulate the reader’s responses with the help of durations and intonation curves. As Figure 10 shows, there is a rather long pause at the (unmarked) caesura, after “fears”, and a much shorter pause at the line ending, after “come”. Phonetically, “fears” is much longer than “come”; so, not surprisingly, it is longer in the present context too (558 and 463 msec, respectively). What may be perhaps telling about the relative durations is a comparison of the word-final continuants (/s/: 163 msec, /m/: 269 msec). This excessive duration of the /m/ appears to compensate for the shorter duration of the ensuing pause. It is illuminating what this reciter does with the final intonation pitches at the versification junctures. Measurably, it is the intonation contour of “doom” that indicates the lowest versification juncture in this quatrain, falling from 82.584 to 73.500 Hz. Intuitively, this is the “reference pitch” (see Chapter 9) of the group, the point at which intonation “arrives home”. After “fears” there is a terminal contour, falling from 121.823 to 94.635 Hz, and then slightly rising to 97.137 Hz. By this it over-articulates (in conjunction with the ensuing pause) the caesura, isolating the first portion of the line from its sequel. There is a vague intuition, which becomes more definite only at the end of the quatrain, that terminal as this contour is, it is not *final*. But it is sufficiently terminal to suggest by way of contrast a non-terminal character for the intonation contour of “soul”, falling from 154.196 to 111.929 Hz, and then rising to 120.492 Hz. Thus, at this point, intonation indicates a temporary rest, arousing expectations for a more final rest and equilibrium (which, in turn, is achieved at the end of the fourth line).

As we have seen, the intonation contour of “soul” falls from 154.196 to 111.929 Hz, and then rising to 120.492 Hz. Further on, as Figure 11 shows, “come” reaches down from 91.116 through 82.276 to 79.317 Hz; “doom” from 82.584 to 73.500 Hz. Likewise, at the end of line 3, the intonation on the second syllable of “control” falls from 100.227 to 78.470 Hz, the intonation of each later line falling lower than that of the preceding one. Thus, a hierarchy of versification junctures is roughly observed in this performance too.

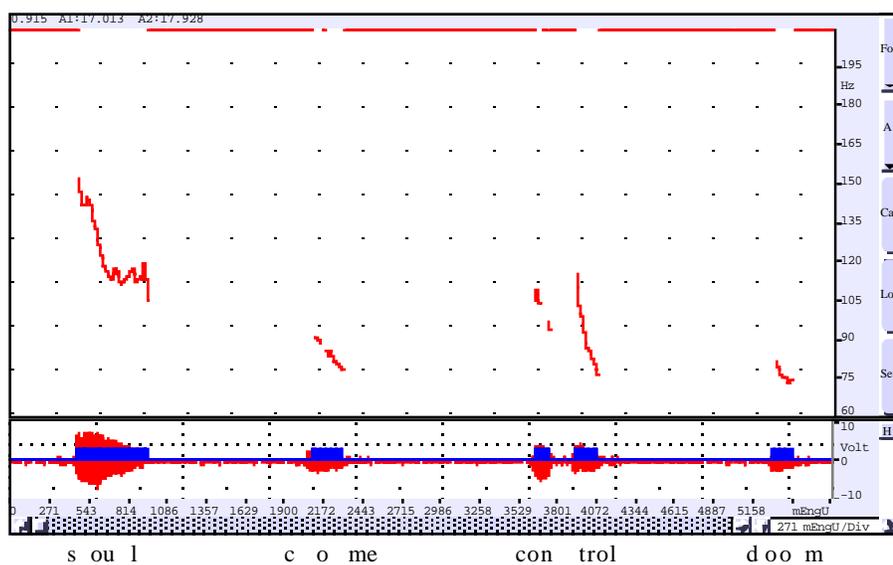
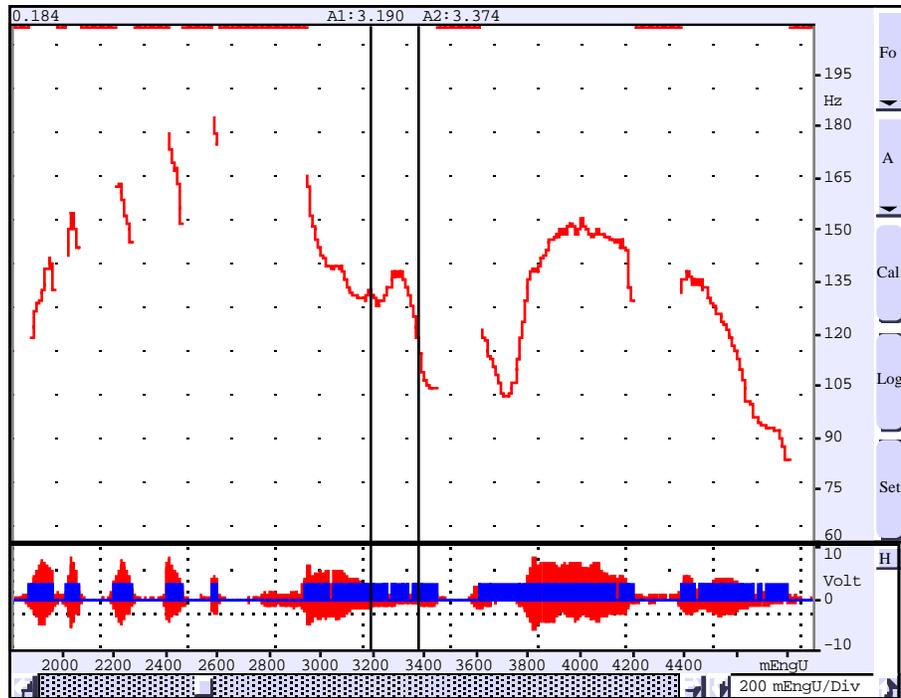


Figure 11 Wave plot and  $F_0$  extract of “soul... come... control... doom” in the Marlowe Society’s reading

In Callow’s reading, the four lines do not yield such a neat hierarchy. Three out of four line endings are indicated by straightforward pauses, and there is no suggestion of syntactic continuity across them. Since they do coincide with major syntactic boundaries, this is not necessarily bad, only not as sophisticated as in Gielgud’s or the Marlowe Society’s reading. At the end of the first line, however, Callow resorts to exactly the same kind of device as Gielgud, and in a more emphatic manner. When listening to the reading, the line ending is indicated by a very strong punctuation of the /l/; “soul” is somewhat shorter in this reading relative to “prophetic” (542 msec as compared to 681 msec; in Gielgud we found 550 vs. 584 msec), the /l/ is 184 msec long (in Gielgud only 41 msec). There is a rather steeply-falling intonation contour on the vowel of “soul”, ending in a rising-and-falling contour sharply delimiting the /l/ (see Figure 12).



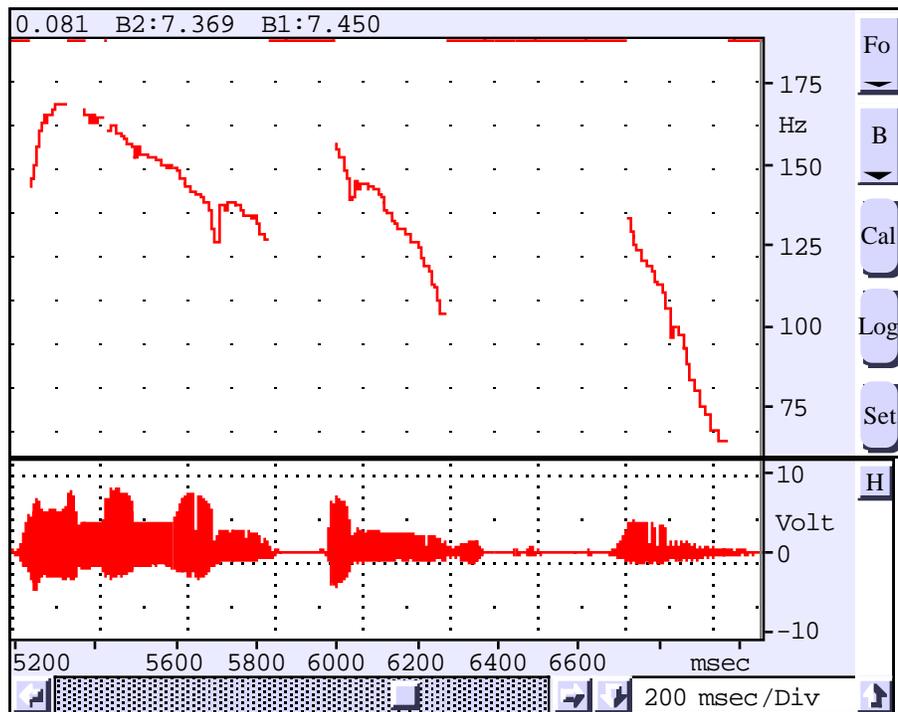
nor the pro phe ti c s o u l of the w ide w orld  
 Figure 12 Wave plot and  $F_0$  extract of “nor the prophetic soul of the wide world” in Callow’s reading

### *All Other Things Being Equal*

I wish to consider two passages in which other things are really equal, in fact, *literally* identical; where the only difference is the line division from which two further differences ensue, (1) run-on / end-stopped lines; and (2) difference in the placement of repeated words. The example is taken from Whaler (1956: 20-21); as will be clear, my interpretation and evaluation of the passages differ greatly from his. We may propose with Whaler, “Have someone read aloud” the following two versions of Milton’s passage from *Paradise Lost* IV, 917ff:

7. But wherefore thou alone? Wherefore with thee  
 Came not all Hell broke loose? Is pain to them  
 Less pain, less to be fled, or thou than they  
 Less hardy to endure? Courageous Chief,  
 The first in flight from pain, had’st thou alleg’d  
 To thy deserted host this cause of flight,  
 Thou surely had’st not come sole fugitive.

8. But wherefore thou alone?  
 Wherefore with thee came not all Hell broke loose?  
 Is pain to them less pain, less to be fled,  
 Or thou than they less hardy to endure?  
 Courageous Chief, the first in flight from pain,  
 Had'st thou alleg'd to thy deserted host  
 This cause of flight, thou surely had'st not come  
 Sole fugitive.



dr ea m i n g o n t h i n g s t o c o m e  
 Figure 13 Wave plot and  $F_0$  extract of “dreaming on things to come” in Callow’s reading

The difference of punctuation is as in Whaler’s book. Let us pretend for a moment that we do not know which is Milton’s “real” passage. Whaler comments:

The listening ear cannot prefer one of these two arrangements to the other, for an intelligent reading of either passage occupies, by the stop-watch, the same time-interval.

This comment is misleading in more than one respect. First, as I shall argue in Chapter 9, time measured by “stop-watch” seems to be quite irrelevant to the appraisal of metre or rhythm. Secondly, for the appraisal of rhythm a mere “intelligent reading” is insufficient; what is needed is a *rhythmical* reading, that is, one that accommodates both phonemic stress-and-intonation contours on the one hand, and metric pattern and intonation contour on the other. Thirdly, before the question of preference may arise, some more fundamental problems must be settled, such as description and interpretation. Finally, as I shall attempt to show, there *are* good structural reasons for preferring one version to the other.

As for description, in a rhythmical performance, the two passages are bound to arouse different impressions on the “*listening ear*”. The *perceived* intonation contours will be quite different in the two passages. Line beginnings and line endings will be cued at different points of the phonemic phrase. Syntactic junctures will occur after different positions of the line, which have different potentials of grouping. As a result, one passage may become more fluid at a point where the other achieves focal stability. On the whole, the difference between the two passages may involve the contrast “divergent/convergent” (I hope to show that this is indeed the case). On the level of interpretation, in the first passage the “listening ear” may detect subtler irony; in the second passage, irony is more straightforward, rather blunt, manifests more patent purpose. If this impression of difference is not entirely private, there must be in the texts something to account for it (having put to a group of students the question “Is irony equally subtle in both passages?”, they were in agreement that irony seems to be “somehow subtler” in the first passage)

Before taking a closer look at the two passages, it will be useful to summarize some principles discussed in the preceding chapters, which may prove relevant to the difference between them. If stress pattern deviates from metre, grouping is demanded for the preservation of rhythm. Strong positions differ from one another with respect to their grouping potential, as follows: position X has the strongest, positions II and VIII the weakest potential; IV is stronger than VI. Grouping is either by stress, or by intonation boundary. The greater the deviations, the stronger the grouping needed. Segmentation into 4 + 6 is less “marked” than into 6 + 4. The convergence of line-ending with syntactic juncture clearly articulates the line; their divergence blurs the shape of the line. Segmentation of the line after positions VI, VII, VIII or IX results in increasing degrees of *requiredness*. A major syntactic juncture after the tenth position results in sharp articulation of the line and focal stability of its closure. Enjambment at the end of a highly required portion results in fluidity. The last, stressed syllable of a stress valley is strongly required. If it occurs in position IV or X, it enhances focal stability. If it occupies position VI or VIII, decreasing degrees of stability are achieved, with further urge to search for stability.

In both passages there is, necessarily, the same number of infringements: nine stresses in weak positions. They will, however, have different impacts, according to their place within the line, and according to the strength of closure at the end of the line. The same holds true of stress valleys. A stress valley or a string of consecutive

stresses achieve greatest stability when they end in positions IV or X. When they end in positions VI or VIII, or when enjambed from the preceding line, they press further, to reach “focal stability”.

Now, it will be observed that excerpt 8 starts on a note of great stability, whereas 7 is vastly fluid. In 8 all the lines end with stressed syllables in the tenth positions. In 7 the tenth positions of lines 1-3 and 7 are occupied by lexically unstressed syllables (although, in lines 1-3 one may assign emphatic stress on “thee”, “them” and “they”). In the tenth positions of each of the first four lines in 8, an interrogative sentence ends. Strong closure is achieved by the convergence of syntactic juncture with line-terminal; and of stressed syllable with strong position. Another factor that strengthens the shapes in these lines is their patent parallelism. The symmetry of these lines is further enhanced by the fact that the first two contain *wh*-questions, the last two “yes/no” questions. In fact, both sentences in any of the two pairs roughly “mean the same”.

The first three lines of excerpt 7 end with strained enjambments; the tenth position of each of them is occupied, as we have said, by lexically unstressed syllables. The fluidity of the passage is enhanced by the syntactic inversions that occur precisely at the line terminals: “Wherefore with thee / Came not all Hell broke loose” and “or thou than they / Less hardy to endure”, putting the prepositional and conjunctive phrases before their respective verb and adjective. The dislocation of these phrases induces uncertainty of meaning at the line ending, with an urge to complete the utterance and render it meaningful. In excerpt 8 the dislocated phrases fall in less prominent places, in the middle of end stopped lines. The repetition of *Wherefore* (anaphora) is “double-edged”, according to whether it occurs in a divergent or convergent environment: it adds vigour to the strong shapes of excerpt 8; in excerpt 7 it adds impetus to the syntactic flow that overrides the line terminal. In the second passage, *Wherefore with thee* completes the line; but, being meaningless in itself, it requires, in turn, completion of the sentence which ends in the middle of line 2 which, in turn, requires completion, and so on.

The segmentation of the two versions by caesura is notable. In excerpt 8 seven out of eight lines are segmented into 4 + 6, which is the more balanced, unmarked segmentation. It arouses weaker expectations for the completion of the line. In excerpt 7 all seven lines are segmented by caesura into 6 + 4. The *requiredness* of the second segment is greater; but since the lines are run-on, the pressure of requiredness enhances the fluidity of the passage. The only line which in 8 is segmented into 6 + 4 is remarkable. Its shape is strengthened by the parallelism on the two sides of the caesura (“less pain” = “less to be fled”). This parallelism subsumes, however, a quite complex structure. The first segment is balanced by *pain* in its second and sixth (strong) positions (“Is pain to them less pain”). The requiredness of closure is heightened by the stress valley that ends the line. The same words in excerpt 7 prevent “focal stability” in positions IV and X (and thus sustain fluidity). Here, *less pain* at the beginning of line 3 is run-on from the preceding line, and ends in position II, which has a low grouping potential, while

the mind is rushing on in search for “focal stability”. The stress valley *less to be fled* is bound to override the stable position IV, and ends in the less stable position VI. The next relatively stable point is achieved in position VI of the next line, again overriding position IV. Line 1 in excerpt 7 almost ends with a stress-valley, had it not ended with an unstressed syllable, further weakened by the run-on sentence. As it stands, the displaced stress in position VII enhances fluidity. A similar metamorphosis is undergone by the string of four stressed syllables “all Hell broke loose”. In excerpt 8 it ends in position X, which has a high grouping potential; in 7 it overrides position IV and ends in position VI, with its lower grouping potential (endorsing, thus, fluidity).

Such sequences of stresses as “all Hell broke loose”, “less pain, less”, and “come sole fu-” have in end stopped lines a perceptual quality different from that in run-on lines. In an end-stopped line, the pressure of a deviant stress is “contained”, its power to affect its environment is kept down. Furthermore, an infringing stress obtrudes upon the integrity of the line which, in turn, strives to establish its shape in the reader’s perception. In run-on lines, deviant stresses may exert themselves more freely, may interact with other Gestalt-free elements, blend into a Gestalt-free ground, or even soften those features that would, otherwise, count toward strong shape. In the first five lines of excerpt 7 they tend to count toward a quality that may be described as “spacious”, “broad”, “having considerable body” (notice, e.g., their impression in the third line, where division into three phrases, rather than into symmetrical two, further loosens the overall shape). In the first five lines of excerpt 8 (e.g., in line 3 with its “symmetrical” parallelism and closure), they rather evoke a strict, narrow, tight quality.

Now we may account for the subtler, more evasive tone of irony in excerpt 7 than in 8. Strong shapes induce a psychological atmosphere of definite direction, of patent purpose; weak shapes of general tendency rather, of uncertainty. It is this psychological atmosphere of uncertainty that renders the irony of this passage so subtle, “disdainfully half-smiling”, in excerpt 7; the psychological atmosphere of patent purpose induced by metric shape is felt sufficient to render the irony of the passage a thought more ostensive, and for some readers even gross. This tendency is manifest in the following line:

9. Courágeous chíf, the first in flíght from páin  
           w s   w           s       w s   w   s       w   s

The caesura organizes this line into two “rhythmically equal” segments (see Chapter 4, “Caesura”). Syntactically, they are apposite (parallel) phrases. This symmetry points up the analogy: “Chief = the first”; and the antithesis “Courageous ≠ flight”. It is all too conspicuous. The strong shape of this line is enhanced by the exceptional regularity of its metre (in excerpt 7 there are no similar lines in which stressed syllables occupy *only and all* strong positions). In excerpt 7 the two phrases are not put so conspicuously and symmetrically side by side. “The first in flight from pain” is, here, analogous with “courageous chief” as much as it is related to

the following clause “had’st . . . of flight”, but not symmetrical with either of them. Correspondences between perceptual units are multiple and vaguer than in excerpt 8, indicating some kind of “depth dimension”, by creating a “background” of fluctuating, ambiguous, “Gestalt-free” relationships. Thus, even where the passage approaches its stable closure, some fluid, uncertain elements are perceived, trembling in the background,

The mutual dependence of the whole and of individual features may conveniently be demonstrated through the last three words “come sole fugitive”. It ends the whole passage with two unstressed syllables of a trisyllabic grouped backward. In excerpt 8, resembling a river, “each of whose tributaries end in a moorbog”, this feature too counts toward *fading away*; in excerpt 7, however, it does not necessarily weaken the closure of the line: being end-stopped, the line-terminal can effectively be signalled by an emphatically falling intonation curve. If metre is allowed to exert its will, “sole”, though blunting prosodic contrasts, may be subordinated, to some extent, to “fugitive”. In excerpt 7 there is a tendency to “keep it down”, enclosed between two more prominent syllables. An intonation inflection on the stressed syllables,  $S_{01_e}$   $f_{ugitive}$ , with a softening effect on the whole, is more easily conceived in 8. Not only because it occurs precisely in the first position of the line, but rather because the whole metric mould is loosened toward the end of this version (“rounding out” each stress, and inducing greater interaction of Gestalt-free elements across the lines). In this version the first five lines, with their strong symmetrical shapes, sustain a tone of pithy, roaring (rather than “half-smiling”) contempt. The last compound sentence, by contrast, constitutes a sort of anticlimax, “dying away” with no fixed strong point. “Sole fugitive” weakens the ending as much as possible: it not only ends the passage by beginning a line; it weakens, retroactively, the ending of the preceding line, ambiguating its closure. “Thou surely had’st not come” *might* end the sequence, meaning “If your colleagues had known your intention to desert them, they would have prevented you from going”. “Come”, grouping the preceding sequence of three syllables that bear no lexical stress, and in precisely the tenth position, cuing the line terminal, tends to bear a rather strong accent (to fulfil its double grouping function). The next two words, however, shift emphasis from “come” in several respects; weakening its tone of *sureness*. Semantically, “Sole” de-emphasizes “come”, suggesting, this time, “they would have accompanied you”; thus, its meaning has an atmosphere of uncertainty and indistinct outlines. Prosodically, the emphatic articulation of the next two stressed syllables, “sole fu-”, levels the contrast between prominence (including that of “come”) and non-prominence; by the same token, the distinct “closure” of the line is considerably blurred. It will be observed, further, that ending a passage in mid-line is not necessarily perceived as “anti-closure”, as *fading away*. It is, rather, a double-edged device, with a high “closural” as well as “anticlosural potential”, whichever is emphasized by surrounding features. Barbara Herrnstein-Smith has pointed out that every new pentameter line of a series reinforces the reader’s expectations for continuation. The poet may effectively indicate the end of the sequence by deviating from the established pattern: by adding a

longer line (as in the Spenserian stanza), or a shorter line. Shakespeare sometimes utilizes this closural potential of shorter lines, as in the following quotations from *Antony and Cleopatra*:

10. That thou, residing here, go'st yet with me,  
 And I, hence fleeting, here remain with thee.  
 Away! [Exeunt.]
11. Be't as our gods will have't! It only stands  
 Our lives upon to use our strongest hands.  
 Come, Menas. [Exeunt.]

Each of these passages *ends* a scene, utilizing *several* closural devices. *Going away* is one of several possible “closural allusions” (Herrnstein-Smith’s term). The appearance of rhymed-verse after a series of blank verse is a deviation from an established pattern; and the fact that it is a deviation in the direction of distinct and symmetrical grouping of lines strengthens shapes (and closure). Symmetry is further enhanced in excerpt 10 by the antithesis within each of the two lines, and the parallelism between the two lines. In excerpt 11 there are further “closural allusions”, e.g., yielding to the gods’ will); and the second line of the couplet is strongly required after enjambment. In excerpts 10 and 11, therefore, the closural potential of shorter lines is actualized by the “coincidence” of several aspects that count toward closure; whereas in excerpt 8, the run-on sentence and divergent metrejoin forces to actualize the anti-closural potential of the final, shorter line.

It would be almost tautological to assert that run-on lines are more fluid than end-stopped lines. On the other hand, it would sound as a parody of critical impressionism to say on one occasion: “This string of four stressed syllables induces on excerpt 8 a quality of vigour and stability”, and on another occasion “This string of four stressed syllables adds impetus and enhances the fluidity of excerpt 7”. I have attempted to specify in what conditions the string of stresses enhances stability, and in what—fluidity. It depends, among other things, upon whether the line is end-stopped or enjambed; and whether the string ends in a position with a high or low grouping potential. Conversely, the mere presence of run-on lines is no warrant for fluidity. It needs enhancement by metric and rhetoric figures. In short, it is the character of the *whole* that determines the impact of any single unit at the lower rank, though dependent, in turn, on their total impact. Milton’s fluidity is no mere failure to achieve stability. It is consistent, pervasive, and structured; various aspects of its language join forces to yield a thick divergent style. Because it is so pervasive, readers feel it cannot be casual.

In the foregoing analysis I hope to have shown not merely that there is a substantial difference between excerpt 7 and 8, in spite of their identical words in an identical order. What is different is the perceptual forces involved. I hope to have shown more than the appraisal—however central—that in Milton’s actual passage

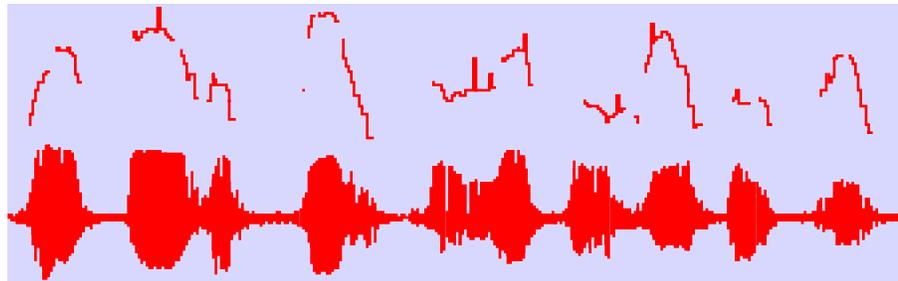
irony is subtler and, therefore, probably more worthy of our praise. I hope to have demonstrated the sort of distinctions that must precede any attempt at evaluation. Excerpt 7 conforms with the structure of the fairly typical Miltonic passage (see our next example). If “complexity”, “unity in variety” count toward excellence in poetry, it is easy to see how it may affect our argument. Both passages, e.g., display a sequence of lines that are end-stopped, and some others that are enjambed. This counts toward diversity. In excerpt 7 the two kinds of lines are subsumed in an overall pattern: the fluid lines seem to lead toward a stable closure into which the metric flow gradually “solidifies”. In this sense weak, fluid shapes appear to have in excerpt 7 some deliberate purpose, and result in a highly complex, unified structure, subsuming fluttering uncertainties at lower ranks. As I indicated earlier, this structure also conveys subtler ironie; and it is followed by what sounds like a definite conclusion; this is, indeed, the version found in *Paradise Lost*. In excerpt 8, conversely, a sequence of discrete, strong-shaped lines is followed by a sequence of fluid lines. The former arouse no expectations for continuation, and the latter achieve no “focal stability”. In this sense, they impose no unified structure upon the sequences of lines, and the passage ends with a marked feeling of deficiency or undecidedness. This, however, should not lead us to the hasty conclusion that whenever we encounter such a structure, it signals, automatically, some deficiency that counts toward badness. In that kind of poetry which capitalizes on abrupt descent in dignity, precisely this kind of anticlimax, or “anti-closure”, may be in place. But then we should expect the text to leave no room for doubt as to the deliberately trivial or ludicrous character of its style, in other respects. It must be pervasive.

#### *Performing Excerpts 7 & 8*

I wrote the foregoing discussion twenty-five years before having access to empirical validation. In what follows, I shall explore some differences between readings of the two passages by one of our most skilled readers, JH, a Ph.D. candidate in linguistics and stylistics at Lancaster University. I have insisted throughout the present study that though duration can be measured quite accurately, it is impossible to tell whether a given segment is longer or shorter than ought to be. There is no standard to which it can be compared. As Knowles (1991) claimed, a lengthening of a segment may be a terminal feature, and may indicate discontinuity with the next segment. Barney (1990) pointed out that intuitively such lengthening may be discerned in some instances of enjambments, but, for the afore-mentioned reason, this cannot be substantiated. One peculiar property of Milton’s blank verse is that he wrote whole passages of “straddled” lines, that is, lines in which each run-on sentence could be an iambic pentameter line in its own right. This enabled James Whaler to rearrange long passages from *Paradise Lost* and obtain regular blank verse in which run-on lines of the original version become end-stopped, and vice versa, as seen above. For the present inquiry the following is most important: those words

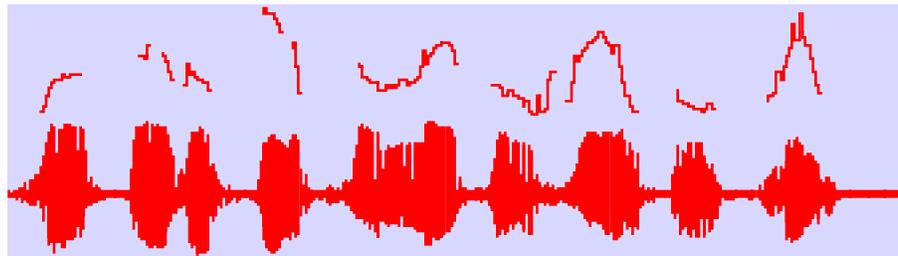
which in one version occur at the end of a line, in the other version occur in the middle. This enables us to compare the physical measurements of the same word in the two versions, in the performance of one reciter. This comes as near as possible to “other things being equal”. Now consider the following syntactic unit:

12. Wherefore with thee / came not all Hell broke loose?



Where fore with thee came not all Hell broke loose  
 Figure 14 Waveform and  $F_0$  track of “Wherefore with thee came not all Hell broke loose” in JH’s reading of excerpt 7.

[Listen to sound file](#)



Where fore with thee came not all Hell broke loose  
 Figure 15 Waveform and  $F_0$  track of “Wherefore with thee came not all Hell broke loose” in JH’s reading of excerpt 8.

[Listen to sound file](#)

There is here a very complex syntactic inversion, placing the verb before the subject, and the prepositional phrase “with thee” before the verb. In the original version, the line ends after “with thee”, ending the verse line in the middle of a syntactic unit, and with an unstressed function word in the tenth position. In the rearranged version, *thee* occurs in the fourth position, before the caesura. In JH’s performance of both versions, *thee* is run into the subsequent /k/ (of “came”): when isolated, we hear /ði:k/, with no detectable pause after the vowel. But, when listening to the readings, in excerpt 7 *thee* is perceived as a terminal segment, emphatically closing the verse line but, at the same time, leading toward the next segment. In excerpt 8, *thee* is perceived as if attached to “came”, but still with a break between them. Apparently, these differences have to do with duration and pitch.

Listen to sound file: "Is pain to them /less pain, less to be fled,"

Listen to sound file: "Is pain to them less pain, less to be fled,"

A similar placement of *them* occurs at the end of the second line of excerpt 7.

13. Is pain to them / less pain, less to be fled,

It is interesting to compare the intonation contours of the same words in the two versions. A superficial glance at the two plots shows a remarkable similarity between the two contours of each syllable. But there is also a substantial, sometimes systematic, difference between them. The pitch tracks of the four syllables “Wherefore with thee” are a case in point. In Figure 14, each one of these syllables is assigned a more elaborate contour than in Figure 15, in spite of the basic similarity. This difference is manifest also in the overall duration of the phrase in the two versions: in Figure 14 its duration is 1266 msec, in Figure 15 only 971 msec (the stop-watch does, indeed, refute here Whaler’s expectations). The syllable boundaries are more clearly articulated by pitch contours in Figure 14; this is most conspicuous with reference to *thee*, by mere looking, even without measurements; but measurements greatly reinforce this impression. In Figure 14, pitch rises on *thee* from 110.171 to 147.381 Hz, and then falls to 86.594 Hz; in Figure 15, it falls from 141.749 to 104.481 Hz. Accordingly, its duration in Figures 14 and 15 is 429 and 272 msec, respectively. Similarly, not only *thee* is more drawn out in Figure 14, both in duration and in pitch span, than in Figure 15, but the boundaries of the other syllables, too, are over-articulated—in anticipation of the enjambment at the line terminal.

Again, in excerpt 13, in both readings there is no pause between the /m/ and the /l/ beginning the next word. When listening to the readings, one has a feeling that something interesting happens on /m/ in “them”, at the end of the line; there is a feeling that the reciter lingers on the /m/, gathering as it were strength for the next line onset. Phonetically, one would expect here no release of the /m/. The spectrogram, however, shows that in both versions the /m/ is released. Now, contrary to expectation, “them” is one and a half times longer in mid-line than at the end (311: 206 msec). What, then, arouses the sense of lingering on the /m/ at the line-ending? The *release* of the /m/. In the line ending, the release is almost twice as long as in mid-line (760: 405 msec).

Now consider the sequence

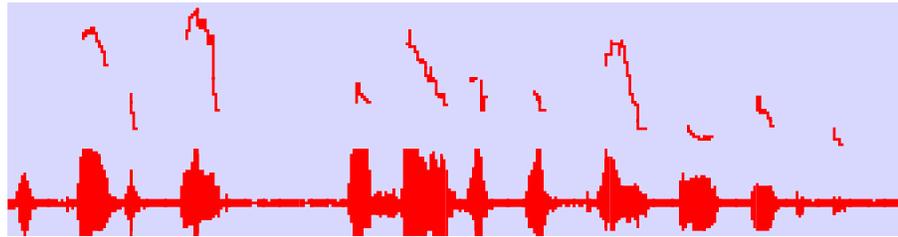
14. Thou surely had’st not come / sole fugitive.

On the sequence “come sole fugitive” in the two versions, I wrote above “If metre is allowed to exert its will, ‘sole’, though blunting prosodic contrasts, may be subordinated, to some extent, to ‘fugitive’. In excerpt 7, there is a tendency to ‘keep it down’, enclosed between two more prominent syllables. An intonation inflection on the stressed syllables  $s_{01e}$   $f_{ugitive}$  with a softening effect on the whole, is more easily conceived in excerpt 8. Not only because it occurs precisely in the first position of the line, but rather because the whole metric mould is loosened toward

Listen to sound file: "or thou than they /Less hardy to endure? Courageous Chief"

Listen to sound file: " Or thou than they less hardy to endure? /Courageous Chief,"

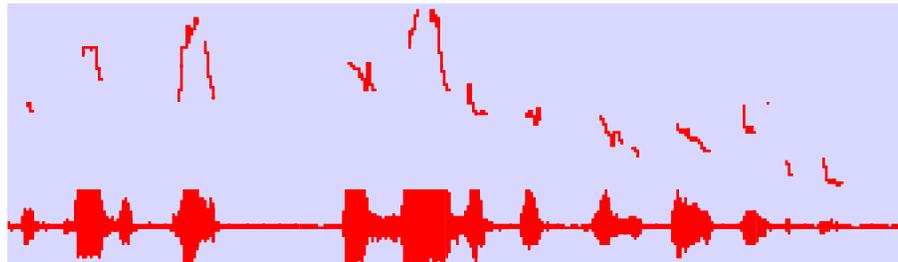
the end of this version (‘rounding out’ each stress, and inducing greater interaction of Gestalt-free elements across the lines”).



this cause of flight thou surely had'st not come sole fu gi tive

Figure 16 Waveform and F<sub>0</sub> track of “this cause of flight thou surely had’s’t not come sole fugitive” in JH’s reading of excerpt 7.

[Listen to sound file](#)



this cause of flight, thou surely had'st not come sole fu gi tive

Figure 17 Waveform and F<sub>0</sub> track of “this cause of flight, thou surely had’s’t not come sole fugitive” in JH’s reading of excerpt 8.

[Listen to sound file](#)

A look at the pitch contours of *sole fu-* shows precisely this kind of difference between the two versions. In excerpt 8, both *sole* and *fu-* are short humpbacks, the former falling from 95.513 to 81.818 Hz, the latter falling from 103.509 Hz. In excerpt 7, *fu-* is a humpback, falling from 91.207 to 83.039 Hz, whereas *sole* is a furrow, moving between 83 and 77 Hz. This appears to instantiate precisely the kind of predictions propounded in the preceding paragraph, “rounding out” each stress in excerpt 8, as the intonation contours indicate. In excerpt 7, the intonation contour of *sole* is “kept down” and subordinated to the following stress. In 7, *sole* is also somewhat shorter than in 8 (338 vs 386 msec.). Gerry Knowles says that the reciter exploited here an opposition between two types of intonation contour, available for bringing out a semantic contrast. When we enumerate several items of equal weight, we use just minute humpback intonation contours as in *sole fu-* in excerpt 8. When the speaker wishes to indicate that a later phrase is not just one more item in the list but some additional information about the preceding item, he will “push down” the intonation contour, just as he did for *sole* in excerpt 7. In terms of the panda joke, in “eats, shoots, and leaves” (three verbs) the intonation contour will be “rounded out” on “eats”, whereas in “eats shoots and leaves” (verb + two direct objects) it will

be “pushed down”. As suggested above, intonation contours have no meanings of their own; contrasting intonation contours may suggest a choice between contrasting phrase markers, *if we are aware of contrasting phrase markers*. But if we are aware of contrasting metric organizations, they may suggest a choice between them. The present instance appears to be just such minimal pair (see also Chapter 6).

When we re-played to JH the verse lines he read, he expressed disappointment. He said he had intended to bring out the sort of prominence we have found in *sole* in excerpt 8, but he wanted to make it more so. Here we may see, perhaps, a discrepancy between the reciter’s intention and his command of his vocal resources. If he had an opportunity to improve his performances, he may have increased, perhaps, the humpbacks of *sole fu-*.

Listening to DF’s reading of these two passages confirms that he too performs, most conspicuously, “sole” with a trough in excerpt 7, and with a humpback in excerpt 8 (this is somewhat obscured in the  $F_0$  tracks; but experimentation with isolating parts of the word “sole” confirms that in the reading reflected in Figure 18 the trough part is dominant; in the other reading, reflected in Figure 19, the rounded-out part is dominant).

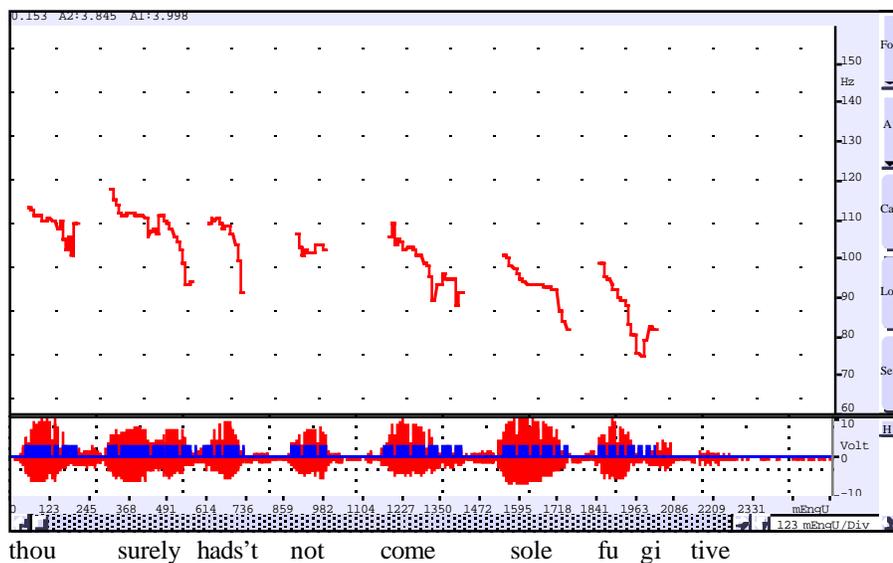


Figure 18 Waveform and  $F_0$  track of “thou surely had’s’t not come sole fugitive”, in DF’s reading of excerpt 7.

[Listen to sound file](#)

Let us go back to my observation “In excerpt 7 there is a tendency to ‘keep [“sole”] down’, enclosed between two more prominent syllables. An intonation inflection on the stressed syllables  $s_{o}l_e f_{u}g_{i}t_{i}v_e$  with a softening effect on the whole, is more easily conceived in excerpt 8 [...] because the whole metric mould is loosened toward the end of this version (‘rounding out’ each stress, and inducing

greater interaction of Gestalt-free elements across the lines)". I was led to it through introspection reinforced by Gestalt theory. Accordingly, I assumed that the "keeping down" effect and the "rounding out" effect may be alternative perceptual qualities even of the same speech signal within different Gestalt contexts. A glance at the  $F_0$  tracks in Figures 14 and 15 shows that in actual performance these effects are reinforced by the respective shapes of intonation curves. A comparison of Figures 14-15 and 16-17 shows a rather consistent pattern: in an end-stopped line the  $F_0$  curve of "broke" and of "sole" is furrow-shaped; in a run-on line it is hump-backed (that is, literally "kept down" and "rounded out", respectively). In Figures 14 and 16 they have exactly the same shape.

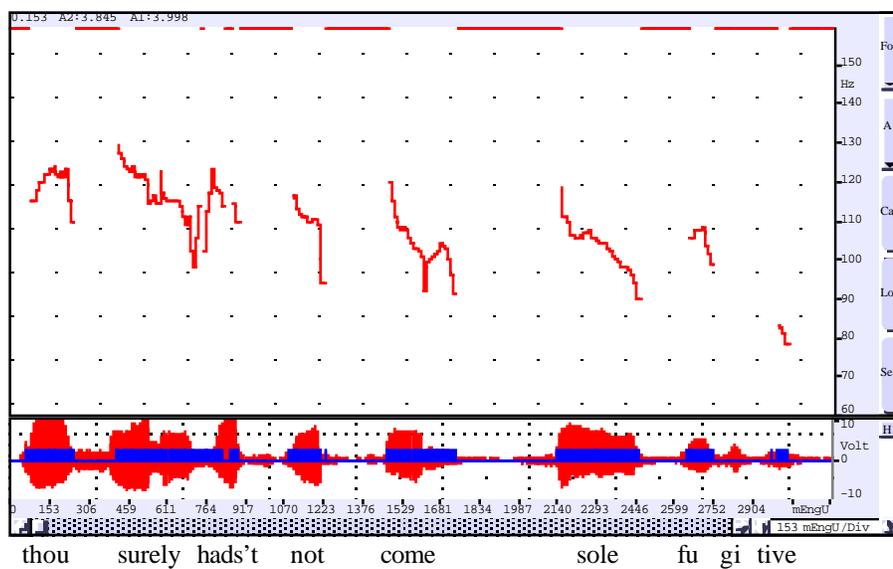


Figure 19 Waveform and  $F_0$  track of "thou surely had'st not come sole fugitive", in DF's reading of excerpt 8.

[Listen to sound file](#)

It is most interesting to compare *surely* and *come* in the two versions. In excerpt 8, *come* is rather inconspicuous, even though it is the last word in a run-on line. It constitutes just one more humpback in the series of humpbacks, *come* 98-80 Hz, *sole* 95-81 Hz, *fu-* 103-91 Hz. As has been said above, the whole metric mould is loosened toward the end of this version; and "come" in this place merely promotes the fluidity of the sequence. The only "arrest" one hears is something emphatic on the /m/, but we could not detect its source. The only possible source of discontinuity we could detect (displaced, as it were, to the /m/), was the discontinuity of amplitude. On the subsequent /s/ there is a rapid increase in intensity at the beginning, maintained throughout. Alternatively, we have got three consecutive stressed syllables in "come sole fu-;" each one has been assigned a separate intonation contour, lasting 362 msec, 362 msec and 325 msec respectively. Thus we receive three paral-

lel, discrete, perceptual units, with articulated boundaries, but with no pause between them. The sequence “sole fugitive” constitutes one syntactic phrase that tends to preserve its perceptual unity; so we tend to assign the perceptual-unit boundary at the word boundary preceding “sole”. Perhaps there is an interaction between this process and the amplitude discontinuity. By contrast, in excerpt 7 one imagines to hear a rise in pitch on /s/ which, on closer inspection, turns out to be a gradual increase in intensity, reaching its peak at the end (this may contribute, perhaps, to the requiredness effect in that version, see below). But on the whole, arguments from intensity should be handled with great care, because very little is known about its effect on speech perception.

In excerpt 7, where *come* occurs in the sixth position, it is most prominent: its pitch resets to 112.967 Hz curling up to 117.749 Hz, with a late peak on 125.026 Hz, whence it falls to 83.350 Hz of “sole”. This rather unexpected pitch movement can be explained as follows: meaningwise, “come sole fugitive” should be grouped together. On the other hand, the best candidate for observing a caesura is after position VI. Thus, the exceptionally strong prominence of “come” emphatically confirms the strong position before the caesura, without indicating any break; at the same time, the late peak exerts a strong drive across the caesura, indicating continuity (cf. Chapter 4, excerpt 22). This structure affects the overall effect of the line in an additional way. The shorter the remaining stretch required to complete the verse line, the stronger the perceptual drive for completion; that is, the greater its requiredness (cf. Tsur, 1972). In other words, a marked caesura (after position VI) generates greater tension than an unmarked one (after position IV). A later syntactic break would generate even stronger requiredness. This amplifies the closural effect of “sole fugitive” (impaired by the unstressed syllable in the tenth position). Now it is interesting that a similar exercise occurs in excerpt 8, again in position VI. Here, the first syllable of “surely” occurs in that position; on this word, pitch moves from 132.467 to 150.369 to 111.273 Hz, and then falls on “had’st” to 104.974-113.544-100.246 Hz (in excerpt 7, by comparison, pitch falls on “surely” from 120.949 to 93.901 Hz). Here the caesura explanation does not hold, for two reasons: there is here a clear (unmarked) caesura after “flight” in position IV; and “surely” ends in position VII, after the caesura area, increasing the requiredness effect. Indeed, the main effect of this pitch reset appears to be in reinforcing this requiredness effect. However, the resulting forward drive does not enhance closure as in excerpt 7, but fluidity that is dominant here.

### *The Divergent Passage*

In my discussion of excerpt 2, I have shown one possible effect of enjambment on meaning: when you stop at the line ending you get a meaning that is different from (in fact, opposite to) the meaning you get when you stop at the end of the syntactic unit that is run on to the next line. I insisted that such a straightforward relationship



the issue. Let us make one more attempt to penetrate the structure of this passage, beginning our inquiry with a discussion by Donald Davie.

“Dramatic” is a poor word for this effect. One wants to speak of “muscularity”, using “muscular”, however, in a special sense. [...] The effect is kinetic. The placing of “Him”, “down” and “to”, in particular, gives us the illusion as we read that our own muscles are tightened in panic as we experience in our own bodies a movement just as headlong and precipitate as the one described. We occupy in ourselves the Gestalt of falling, just as we do before a good painting of the same event; it is hardly too much to say that the inversion of word order (object-subject-verb) has the same effect upon us as seeing the angel’s head near the bottom of the painted canvas and his heels near the top (Davie, 1960: 70-71).

Who would not agree that the enormous impact of this passage has to do with “the placing of ‘Him’, ‘down’ and ‘to’”, and with “the inversion of word order”? But it appears that Davie wishes to add something to his account, and to this end he introduces the analogy with painting, and Gestalt, and the kinetic effect of “muscularity”. Now, the problem with this explanation is that it is only an analogy, with many links missing, without which it cannot really be illuminating. Furthermore, it rather illegitimately combines the empathy-theory and Gestalt-theory of art. Such Gestaltist art critics as Rudolf Arnheim are inclined to dismiss as redundant the very assumption that the notion of motor mimicry is needed to account for our appreciation of any painting. As for my own approach, the minimum I would require is a more exact description of Milton’s passage, and a way systematically to relate it to the reader’s response, be it motor mimicry or other. For if there is one thing Davie’s passage does extremely well, it is that in the disguise of psychology, it *tunes the reader’s mind* to the effect of the description.

As for movement in painting, in Chapter 3 I considered at some length Arnheim’s conception of “perceptual forces”, according to which our perceptual field is disturbed in a painting by certain shapes. It is the spectator’s need to bring the field back into balance, into focal stability, that incites him to perceive it as pressing, or actually moving in the direction of some point where stability may be achieved. Imagine, for instance, that a painter like El Greco undertook to paint the scene described by Milton; we might expect him to explore oblique directions, interfering with all conceivable symmetric arrangements and upsetting the stability of the painting’s framework, as it were. This would render the downward movement impetuous indeed. Another difficulty with Davie’s description directly concerns “the placing of ‘Him’, ‘down’ and ‘to’”. What is so extraordinary about that placing? Is it only the dislocation of “Him”? And if so, what is so peculiar about this dislocation? Obviously, the placing is governed by certain rules of perception and achieves its extraordinary impact by the interlocking of the latter with certain additional effects.

The first thing to notice is that the downward motion is part of a much larger scheme of movement. It is preceded by Satan's "upward" movement. The two are contrasted not only in direction, but also in cumulative impact of the one, as opposed to the suddenness, explicitness, and concentrated energy of the other. In lines 34-44, there are scattered expressions referring to Satan's ambition and pride, his "haughtiness": he is "*stirred up* with envy", "aspiring / To set himself in glory *above* his peers", "He trusted to have equalled the most *High*", "*Raised* impious war in Heaven". There is in Satan's vigorous *fall* some kind of moral as well as perceptual "justice": what goes up, must come down; and the longer the free fall, the greater the acceleration.

The main effect of the passage may be described by a phrase to which Donald Davie would hardly object, namely, "articulate energy". The energy draws upon the perceptual forces mentioned above and, on the semantic level, upon contrasts and connotations of violence: "Almighty Power ... flaming ... hideous ruin ... penal fire ... durst defy th'Omnipotent to arms". "Headlong" means both "headforemost" and "hastily, impetuously". "Combustion" means both "burning" and "violent excitement, tumult". The opposition "from th'etherial sky ... to bottomless perdition" suggests tremendous energy.

I have used "articulate" in the sense of "jointed, separated into well-shaped pieces". Tension, on the other hand, arises from intrusion upon well-shaped sentences. So, on the syntactic level, the phrase "articulate energy" involves an oxymoron, a tension between two opposite tendencies. On the one hand, the energy is derived from dislocations, inversions, enjambments it has a tumultuous, almost chaotic effect. On the other hand, the passage can be divided into well-shaped units, which prevent it from chaotically falling into pieces. The following paraphrase may be regarded as the core of the passage: "The Almighty Power hurled him down". It is this sentence that has been elaborated and has had its parts dislocated.

Dislocations and inversions have their peculiar dynamics. The greater the number of functions a dislocation fulfills, the more justified it seems; the further away a syntactic unit is removed, the greater the tension it generates (provided that it is not so far removed that the reader cannot relate it to its context); similarly, the smaller the unit, the more it resists dislocation. An inversion at the head of a passage may have a different function from one at its end: in the former case, it may herald what comes, highlighting, so to speak, the heralded part of the sentence; in the latter, it may reinforce a feeling of closure, of finality. Thus, the placing of "Him" differs from "there to dwell" (in line 47, instead of "to dwell there") in three important respects. First, it has been moved much further away than "there". Second, it opens up the movements, "heralding" what turns out to be a verb (of violent action). By contrast, the dislocation of "there", signals what appears to be a (false) closing point; on a smaller scale, it also heralds a verb denoting permanent residence, as opposed to the impetuous movement denoted by the previous verb. Third, "Him" is a pronoun that bears emphatic stress here, but is manipulated into a weak position that is, in the present context, it intrudes upon an iambic foot in the middle of a

line, and initiates a perceptual force on a miniature scale too. The inversion resulting in “there to dwell”, by contrast, causes a metrically deviant phrase to conform with metric pattern, thus achieving “focal stability” at a crucial point of the line.

“Him”, in fact, is the smallest syntactic unit that could be dislocated. It is a monosyllabic word, usually unstressed and with a reduced vowel. How violently it resists dislocation will be seen, by way of contrast, if we alter the line, by changing a single phoneme, to “*whom* the Almighty Power hurled ...”, leaving little trace of the high tension; or if we compare it with another dislocated unit, a complete clause, occupying a whole pentameter line (and involving no extra syntactic predictions): “Who durst defy th’Omnipotent to arms”. The dislocation of this clause passes almost unnoticed. Yet, observe this: it is a relative clause, with no clear indication of its antecedent. The most plausible candidate is precisely “Him” at the beginning of the sentence. Assuming this is correct, the dislocation may generate the impression of a closed system, of a solid framework encompassing the rest of the passage. The possible impression is reinforced by the analogy of “the Almighty Power” and “th’Omnipotent to arms” in lines 44 and 49 (the latter, however, is again but a quasi-symmetry).

Now, consider the sentence “the Almighty Power hurled him down”: its span is “pulled apart” in one direction by “him”, in the other by “down”. A particle like “down”, important as it is for the collocation, may be felt to be “one item too much” in the environment of other short adverbials such as “headlong”, or “flaming”. Still, its omission could result in a feeling of absence. A lesser poet than Milton might have been forced into either position of incompetence (i.e., piling up adverbials, or omitting the one felt to be redundant). Milton turns the difficulty into a source of strength, by elaboration and dislocation: first, he omits “down” (solving the problem of “redundancy”); then, having elaborated the clause with a series of longer prepositional phrases, the boundaries of which “happen” to coincide with metrical boundaries, he appends, so to speak, the missing word. In the wild commotion of the passage the reader has no time left to notice the absence of “down”, but once he encounters the word, he suddenly realizes that this is what he had been expecting all along. The sentence is strenuously drawn apart between the extremes of two isolated monosyllabic adjuncts of the central verb.

The articulating power of the last (strong) position of a line may be enhanced through *requiredness*; this happens if the position is occupied by a monosyllable preceded by a polysyllable with its stressed syllable in its last but one strong position. In excerpt 15, four out of six lines have such an ending. The impact of “down” is strengthened by the fact that it is *required* in this sense, too. In other words, even if we could do without “down” from the idiomatic point of view, it is emphatically required from the metric point of view.

With “down”, then, the reader comes to a point where, after a series of tensions and “frustrations”, he first has the feeling of completeness, of closed shape. It is, then, this constant distortion and reinstatement of Gestalts that may have impressed Donald Davie some readers probably feel that it “gives us the illusion as we read

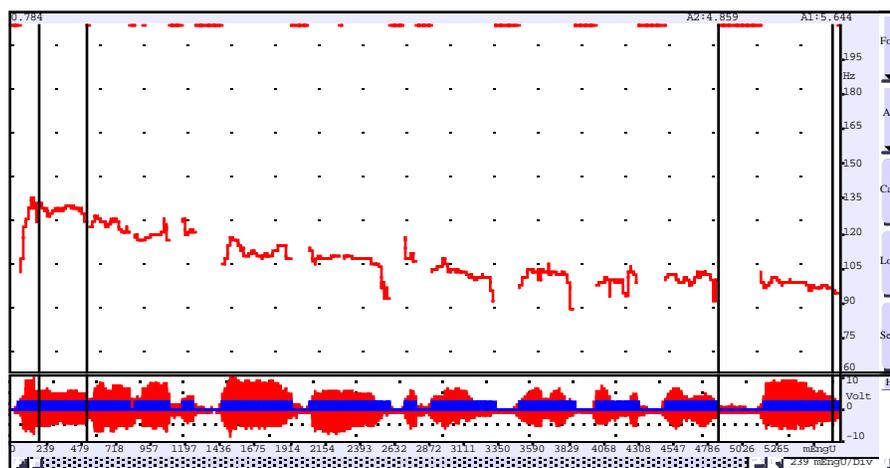
that our own muscles are tightened in panic... We occupy in ourselves the Gestalt of falling". This, however, is a secondary response, and by no means an essential or universal one. We can better account for the phenomenon in question by appealing to the reader's sense of distorted balance, followed by balance and relief when equilibrium is restored. Moreover, as I shall argue, this kind of structural manipulation is exploited to arouse in the reader a feeling not only of an *impetuous* falling but, also, of an *endless* falling. How can a text *show*, rather than merely *tell* its readers that a falling is endless indeed?

This process of the disturbance and reassertion of Gestalts is further extended into the subsequent lines. With "down", the reader receives a strong feeling of closure; he also has the feeling that with it, he has reached the downmost point of the fall. However, as the absence of punctuation at the line-terminal may indicate, the syntactic unit is not yet necessarily over; the next line opens again the apparently closed Gestalt that had been achieved so hard. It is not merely an additional item in the series of adverbials "headlong ... from th'ethereal sky ... down ... to bottomless perdition...", but "down", until now regarded as a verbal particle, or a free adverb, is rankshifted to a preposition, changing its implication from "the downmost point" to "in a descending direction"; at the same time, "bottomless" informs us that there is no downmost point at all. "To bottomless perdition" opens up a new pentameter line that, in turn, requires its completion; the phrase overrides caesura and leaves a *required* stretch, three positions long. The sense of completeness is achieved with "there to dwell". We have seen above how this phrase reinforces a feeling of finality, of stop, of "focal stability" both by the dislocation of "there" and the contrasting of "dwell" with "hurled". This finality, again, turns out to be illusory, and the Gestalt is opened up by a run-on phrase "to dwell in adamantine chains". It is this sequence of stops, experienced and frustrated, that makes the reader experience an "endless fall".

In spite of this endless fall, however, the passage itself *must* stop somehow; what is more, it ought to have a "proper cessation". Line 48 is the first one in this passage that is really end-stopped. It enhances its sense of closure by two parallel phrases, separated by a "marked" caesura: "In adamantine chains / and penal fire" (a segment of four positions at the end manifests *some* degree of requiredness). The poet, having cried "Wolf!" so many times, is required to provide some additional proof to make us "believe" that the expanded clause and the series of *frustrated* closures have come indeed to an end. This proof is provided by a "gratuitous" sequence: "Who durst defy th'Omnipotent to arms". "One of the most effective ways to indicate the conclusion of a poem generated by an indefinitely extensible principle is simply to modify that principle at the end of the poem", as Herrnstein-Smith has it. The sequence in question, beginning a new (dislocated) clause, convinces us that the previous "never-ending" clause is at last over; by reverting to the theme preceding the fall, it convinces us that the downward motion has come to an end; by converging with a pentameter line, it makes no further requirements for completion. This is the first and only line in our quotation that is run-on neither at its beginning nor at

its end; moreover, it has an unmarked caesura (that is, after position IV). One of the effective devices that already have been used twice for “sabotaging” closure is reapplied in this line, this time for enhancing closure. Strictly speaking, the last phrase, “to arms”, has a fairly high degree of *requiredness*, since “Who durst defy th’Omnipotent” would make ample sense by itself, but would leave the line incomplete. By the addition of “to arms”, not only the craving for completion is gratified, but the sense of *defy* has been implicitly changed from some general kind of opposition and impiety to the more specific “challenge to combat or contest”, inherently requiring the complement “to arms”.

DF, a colleague from the academy, one of the most skilled readers of the corpus, performed this passage twice. Being unsatisfied with the first reading in which he “ran out of breath”, he read it again, taking “a longer breath”. He accomplished the remarkable feat of reading the whole passage on one breath.



hi m the almighty power hurl'd head long flaming from the 'thereal sk y

Figure 18 Waveform and  $F_0$  track of “Him the Almighty Power / Hurl'd headlong flaming from th'ethereal sky”

[Listen to sound file](#)

The first one-and-a-half lines display an uninterrupted stream with a gradually falling intonation contour. The envelope contour (Figure 19) shows peaks protruding over the other peaks on the first two phonemes of “him”, on “power” and on “sky”. These words are also “unduly” lengthened.<sup>9</sup> Indeed, when listening to this excerpt, one perceives that they are exceptionally over-stressed relative to their environment. The overall effect is that the uninterrupted stream of speech is emphatically punctuated and parsed in perception at these points. It should be noted

<sup>9</sup> Here are some measurements of duration in the excerpt: *hi*: 137; *m*: 359; *the al*: 331; *migh*: 266; *ty*: 188; *power*: 684; *hurl'd*: 649; *head*: 234; *long*: 500; *flaming*: 569; *from*: 287; *the'ethereal*: 625; *sky*: 784.

that the phoneme /m/ alone is longer than the two syllables *the al-*, or the stressed syllable *migh-*. The unduly long /m/ not only generates strong stress, but also segregates the word from its sequel; this is counteracted by a conspicuous late peak on the preceding vowel which, we know by now, exerts a propelling force across the “break”. As a result, the word is perceived also as over-articulated, much in harmony with my foregoing analysis (written almost a decade before the recording was made, with which DF was not familiar). The unusual duration of “hurled” too lends it a powerful stress which, again, is in harmony with the foregoing analysis. The stressed syllables *migh-* and *head-* are relatively short; their stress is indicated by a small pitch obtrusion. One more thing is conspicuous in this F<sub>0</sub> extract: the sequence “hurled headlong flaming” is perceptually parsed into three units by falling intonation curves jutting below the base line.

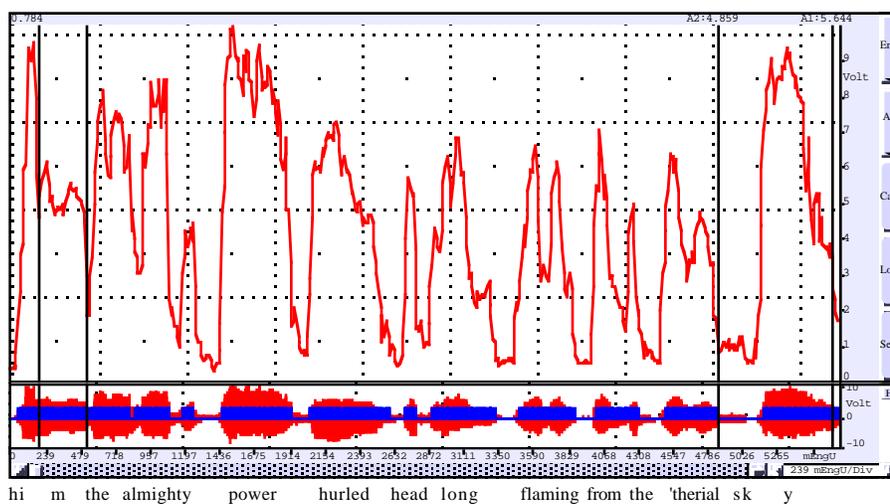


Figure 19 Waveform and Envelope of “Him the Almighty Power / Hurled headlong flaming from th’etherial sky”

In the next three lines one can see on the wave plot without particular measurements that the words “down”, “there” and “fire” are over-stressed by loudness and duration. In the first and third words this reflects the punctuation of line endings; in the second, word-order. In “dwell” loudness is less evident; but duration compensates for this. While “there” is 291 msec long, the duration of “dwell” is 454 msec; that of /l/ alone is 213 msec, that is, almost as long as the whole word “there”. In this way, “dwell” too indicates a conspicuous line ending. Here too one may see intonation contours jutting out at the base line. Figures 18 and 20 indicate that this performer performed in one breath the entirety of excerpt 15, except for the last line, with a gradually descending uninterrupted intonation contour. At the same time, prominent instances of loudness and duration on some crucial words

effectively “punctuate” the line endings. The lines are further parsed into smaller chunks by intonation contours jutting out at the base line.

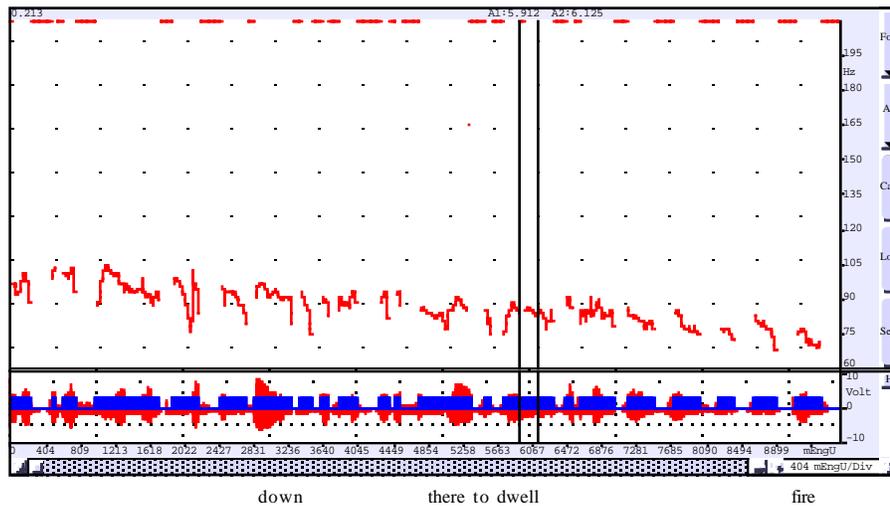


Figure 20 Waveform and  $F_0$  track of “With hideous ruin and combustion down / To bottomless perdition, there to dwell / In adamant chains and penal fire”

[Listen to sound file](#)

### To Sum Up

The present chapter puts forward a conception of enjambment that involves an apparently minority view of intonation in the delivery of poetry. While the accepted view, formulated by Chatman, assumes that the oral performer of poetry must choose between competing intonation patterns and their related meanings, the present work assumes, with Katherine Loesch, that the reciter *can* indicate simultaneously conflicting intonation patterns. The foregoing discussion provides evidence that competent readers, both professional actors and colleagues from the academy, are capable of conveying considerable complexities—even greater than what Chatman may have envisaged.

As for the relationship between enjambment and meaning, we have discussed an illuminating example with reference to excerpt 2, in which the run-on portion of the sentence inverted the meaning obtained at the end of the line. In defiance of the belief of many critics and teachers, I claimed that such straightforward instances are the exception rather than the rule. In most instances, enjambment gives rise to “perceptual qualities” rather than “meanings”. Still, as we have seen with reference to excerpts 7, 8 and 15, enjambment *may* have a very significant, less direct, relationship to meaning. One of the central issues in my poetic theory is a distinction between “convergent” and “divergent” styles, with their respective “witty” or “emotional” qualities. Important ingredients in this distinction are oppositions be-

tween metric regularity versus deviance, and end-stopped versus run-on lines (although there are also some conspicuous semantic oppositions, which are outside the scope of the present inquiry). We have seen that the perceptual dynamics arising from enjambment may interact with irony (excerpts 7-8), or with the impetuous fall in excerpt 15. Excerpts 7, 8 and 15 also taught us something important about the typical Miltonic passage. Milton's blank verse is not just an aggregate of lines that may be end-stopped or run on. The order of run-on and end-stopped lines is by no means insignificant. In excerpts 7 and 15 we have a "fluid" passage that "leads up" to a stable closure, from which the whole passage may be viewed and re-structured. In the course of reading it is experienced as near-chaotic; in retrospect, as exceptionally complex but well-organized. This is what I call a "divergent passage". The re-writing of excerpt 7 as excerpt 8 shows that it is not merely the case that some verse lines are run on and some end-stopped; in Milton's original, but not in the re-written, version a significant structure is superimposed upon them after the event. In Chapter 9 I shall call this process "back-structuring", and shall suggest a cognitive mechanism that is assumed to underlie it.